



SUPERINTENDENCIA DE ELECTRICIDAD  
"Garantía de todos"

"Año de la Innovación y la Competitividad"

Superintendencia de Electricidad  
Gerencia de Compras  
**RECIBIDO**  
Hora 4:52 Fecha 27-12-19  
Por Lauran

SIE-E-DRH-DIR-2019-0107

A : Lic. Gilberto Hernández  
Director Administrativo Financiero

Asunto : Solicitud de Pago

Fecha : 19 de diciembre 2019

**GERENCIA DE CONTABILIDAD**  
19 DIC 2019 TR-E- 0 0 0 1 9 6  
**PAGADO**

Solicitamos el pago, vía transferencia bancaria, a favor de la Asociación Comité Regional de la CIER para Centroamérica y El Caribe (CECACIER), correspondiente a la 'Conferencia Panamericana sobre energía marina PAMEC 2020 (San José Costa Rica), según Instrucción Administrativa SIE-ICSIE-C2019-0285 d/f 13 de diciembre 2019, para los siguientes colaboradores:

1. Luis Benjamín Toral
2. José Antonio Fabián
3. Laura Miriam Jones

CONTROLORÍA GENERAL  
DE LA REPÚBLICA DOMINICANA  
27 DIC 2019  
REVISADO  
Unidad de Auditoría Interna

La matrícula tiene un valor de \$1,269.90 dólares por los 3 participantes, compra de pasajes a **San José de Costa Rica** saliendo el 25 y regresando el 30 de enero 2020 y los viáticos correspondientes.

**Datos de la Transferencia**

**Banco de Costa Rica, San José, Costa Rica.**

**Cuenta Corriente No. 001-0280406-9**

**Cuenta Cliente. 15201001028040699**

**SWIFT: BCRICRSJ a la Asociación Comité Regional de la CIER para Centroamérica y El Caribe (CECACIER).**

Atentamente,

*Marcia Rijo Reyes*  
**Marcia Rijo Reyes**

**Gerente Adm. de RRHH**

mrr/ap



*Comité*  
19/12/19  
3:23  
19/12/19



SUPERINTENDENCIA DE ELECTRICIDAD  
"Garantía de todos"

"Año de la Innovación y la Competitividad"

## INSTRUCCIÓN ADMINISTRATIVA

**SIE-I-CSIE-C-2019-0285**

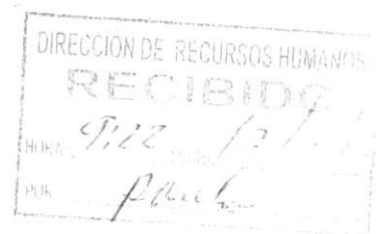
FECHA: 13 de diciembre de 2019  
A: MARCIA RIJO, Gerente Administrativa Recursos Humanos  
CC: DIÓGENES RODRÍGUEZ, Miembro del Consejo  
JUAN TEJEDA, Miembro del Consejo  
ASUNTO: APROBACIÓN DE FORMACIÓN PROFESIONAL



El CONSEJO SIE, en su Reunión Administrativa d/f 11 de diciembre de 2019, sobre las solicitudes de Formación Profesional, tomó decisión conforme se detalla en el anexo adjunto a la presente.

Atentamente,

**CÉSAR A. PRIETO SANTAMARÍA**  
Superintendente de Electricidad  
Presidente Consejo SIE



Adjunto:

- Solicitudes Formación Profesional:
  - Cuadro solicitudes Participación en Congresos/Seminarios/Conferencias/Otros (1 página); y,
  - Cuadro solicitudes Conforme a la Política Promoción de Estudios (1 página)
- Expedientes originales de las solicitudes aprobadas.



**ANEXO 1 DEL ACTA DE REUNIÓN ADMINISTRATIVA DE FECHA 11 DE DICIEMBRE DE 2019**

**TEMA7 SOLICITUDES DE FORMACIÓN PROFESIONAL**

**7.1 PARTICIPACIÓN EN EVENTOS: CONGRESOS/SEMINARIOS/CONFERENCIAS/OTROS**

| N°    | REFERENCIA                                 | BENEFICIARIO (S)  | EVENTO   | DECISIÓN CONSEJO SIE  |
|-------|--|---|--|---|
| 7.1.1 | SIE-I-DRH-DIR-2019-0787, D/F<br>12/11/2019 | DE LA DIRECCIÓN MEM:<br><br>*1* ✓<br>LUIS TORAL<br>INGENIERO SENIOR<br><br>*2* ✓<br>JOSÉ FABIÁN<br>INGENIERO SENIOR   | CONFERENCIA PANAMERICANA DE ENERGÍA MARINA (PAMEC 2020)<br><br><u>ORGANIZADOR:</u><br>CECACIER/GRUPO ICE<br><br><u>LUGAR:</u><br>COSTA RICA<br><br><u>FECHA:</u><br>DEL 25 AL 31 DE ENERO 2020<br><br><u>COSTO:</u><br>US\$465.00 POR PARTICIPANTE | APROBADO PARA LOS INGENIEROS: LUIS TORAL Y JOSÉ FABIÁN. ✓<br><br>APROBADO: GASTOS DE VIAJE: PASAJE AÉREO Y VIÁTICOS               |
| 7.1.2 | SIE-I-DRH-DIR-2019-0821, D/F<br>29/11/2019 | DE LA DIRECCIÓN LEGAL ✓<br><br>*1*<br>DOLLY D. CRUZ TAVERAS<br>GERENTE UNIDAD<br>AUTORIZACIONES<br><br>*2*<br>LAURA M. JONES NADAL<br>ABOGADA JUNIOR UNIDAD<br>AUTORIZACIONES | CONFERENCIA PANAMERICANA DE ENERGÍA MARINA (PAMEC 2020)<br><br><u>ORGANIZADOR:</u><br>CECACIER/GRUPO ICE<br><br><u>LUGAR:</u><br>COSTA RICA<br><br><u>FECHA:</u><br>DEL 25 AL 31 DE ENERO 2020<br><br><u>COSTO:</u><br>US\$465.00 POR PARTICIPANTE | APROBADO PARA LAURA M. JONES NADAL, ABOGADO JUNIOR DIRECCIÓN LEGAL. ✓<br><br>APROBADO: GASTOS DE VIAJE: PASAJE AÉREO Y VIÁTICOS ✓ |

**GERENCIA DE CONTABILIDAD**  
  
19 DIC 2019 TR-E- 0 0 0 1 9 6  
**PAGADO**

Unidad de Auditoría Interna  
**REVISADO**  
27 DIC 2019  
CONTROL ORIA GENERAL  
DE LA SUPERINTENDENCIA DE ELECTRICIDAD  
SANTO DOMINGO, R.D.

*Handwritten signature*





SUPERINTENDENCIA DE ELECTRICIDAD

"Garantía de todos"

"Año de la Innovación y la Competitividad"

DIRECCION DE CONTABILIDAD

19 DIC 2019 TR-E- 0 0 0 1 9 6

PAGADO

SIE-I-DRH-DIR-2019-0787

FECHA : 12 de noviembre de 2019

A : CONSEJO SIE

VÍA : PAULINA SANTANA, Secretaria Consejo

ASUNTO : PARTICIPACION CONFERENCIA.

La Dirección De Recursos Humanos, tiene a bien remitirle la solicitud de participación en la Conferencia Panamericana de **Energía Marina (PAMEC 2020)** para la persona detallada a continuación, bajo la consideración del Consejo de esta Superintendencia De Electricidad.

|                      |                                    |
|----------------------|------------------------------------|
| Empleados:           | Luis Toral y José Fabián           |
| Programa:            | <b>Energía Marina (PAMEC 2020)</b> |
| Impartido por:       | Cecacier/Grupo ICE (Costa Rica)    |
| Inicio del Programa: | 25 al 31 de enero 2020             |
| Costo del Programa   | US\$465.00 C/U                     |



Atentamente,

*Marcia Rijo Reyes*  
**Marcia Rijo Reyes**  
 Gerente Adva. RR/HH  
 MRR/pr



SECRETARIA DEL CONSEJO  
RECIBIDO

Hora: 3:44 PM Fecha: 13/11/19  
*Paulina Santana*

Cargo por Capacitación



SUPERINTENDENCIA DE ELECTRICIDAD  
"Garantía de todos"

"Año de la Innovación y la Competitividad"

3:57 13/12/19  
V. R. M. J. S. R.

SIE-I-DMA-DIR-2019-0030

8 de noviembre de 2019

GERENCIA DE CONTABILIDAD  
19 DIC 2019 TR-E- 0 0 0 1 9 6  
**PAGADO**

**A:** Sr. César A. Prieto, Superintendente de Electricidad.  
Sr. Diógenes Rodríguez, Miembro del Consejo SIE.  
Sr. Juan Tejeda, Miembro del Consejo SIE.

**Vía:** Dirección de Recursos Humanos

**Asunto:** Solicitud de participación en la Conferencia Panamericana de Energía Marina, (PAMEC 2020)

Distinguidos señores:

Amparados en el presupuesto para capacitación que tiene asignado esta Dirección de Mercado para el año 2020 (RD\$1MM), y considerando la importancia que reviste el tema, así como la necesidad de profundizar en algunos aspectos técnicos relevantes sobre la tecnología marina, sometemos a consideración del Consejo la solicitud de aprobación para los siguientes participantes:

Curso: Conferencia Panamericana de Energía Marina - PAMEC 2020  
Solicitantes: Luis Toral y José Fabián  
Impartido por: CECACIER / GRUPO ICE (Costa Rica)  
Costo: US\$415.00 (hasta el 1-dic-2019)  
US\$465.00 (2 de dic - 27 de enero, 2020)  
Fecha: 25 - 31 enero, 2020 (ver agenda anexa)  
Modalidad: Presencial

CONTRALORÍA GENERAL DE LA REPÚBLICA DOMINICANA  
27 DIC 2019  
REVISADO  
Unidad de Auditoría Interna

Adjuntamos para su conocimiento el contenido del programa.

Saludos cordiales,

**Daniel Ramírez**  
Director Mercado Eléctrico Mayorista

Anexo: Programa del Seminario





SUPERINTENDENCIA DE ELECTRICIDAD

"Garantía de todos"

"Año de la Innovación y la Competitividad"

GERENCIA DE CONTABILIDAD

19 DIC 2019 TR-E- 0 0 0 1 9 6

**PAGADO**

| AGENDA VIAJE COSTA RICA (PAMEC) |   |               |
|---------------------------------|---|---------------|
| FECHA                           | ACTIVIDAD   | HORA          |
| 25-ene-2020                     | LLEGADA COSTA RICA                                      | -             |
| 26-ene-2020                     | ALMUERZO ORGANIZADO POR EL EMBAJADOR DE CANADA          | 12:00 - 14:30 |
|                                 | APERTURA CONFERENCIA                                    | 15:00 - 16:30 |
|                                 | ANUNCIO DE LIDERES DE MESA REDONDA                      | 18:00 - 18:30 |
| 27-jul-2020                     | PERSPECTIVAS GLOBALES                                   | 8:30 - 9:00   |
|                                 | ESTABLECIENDO LA ESCENA DE LA INVESTIGACION REGIONAL    | 9:00 - 10:15  |
|                                 | SESIONES SIMULTANEAS                                    | 10:45 - 12:15 |
|                                 | SESIONES SIMULTANEAS                                    | 13:15 - 15:15 |
|                                 | SESIONES SIMULTANEAS                                    | 15:45 - 17:30 |
| 28-ene-2020                     | ENERGIAS RENOVABLES, REDES E INTEGRACION                | 8:30 - 10:00  |
|                                 | CUESTIONES SOCIALES, AMBIENTALES Y ECONOMICAS           | 10:30 - 12:45 |
|                                 | MESA REDONDA  | 13:45 - 14:30 |
|                                 | VISITA DE SITIO Y TALLERES TECNICOS                     | 14:30 - 18:00 |
| 29-ene-2020                     | VISITA TECNICA GENERADORES ELECTRICOS                   | DIA COMPLETO  |
| 30-ene-2020                     | REUNION CON ICE (DISTRIBUIDOR/COMERCIALIZADOR)          | AM            |
|                                 | MINISTERIO DE AMBIENTE Y ENERGIA (DIRECCION DE ENERGIA) | AM            |
|                                 | REUNION CON ARESEP (REGULADOR)                          | PM            |
| 31-ene-2020                     | SALIDA COSTA RICA                                       |               |

27 DIC 2019  
REVISADO  
Unidad de Auditoría Interna  
CONTRALORIA GENERAL DE LA REPUBLICA DOMINICANA



## October 23, 2019- CONFERENCE PROGRAM ADVANCE DRAFT

The Pan American Marine Energy Conference, PAMEC 2020, will provide a forum where those at the forefront of technology development in the sector meet, interact, share their latest knowledge and debate new ideas and issues pertinent to wave, offshore wind, ocean thermal energy conversion, salinity gradient and tidal energy conversion with a focus on building and strengthening research and development ties in the Americas, and globally.

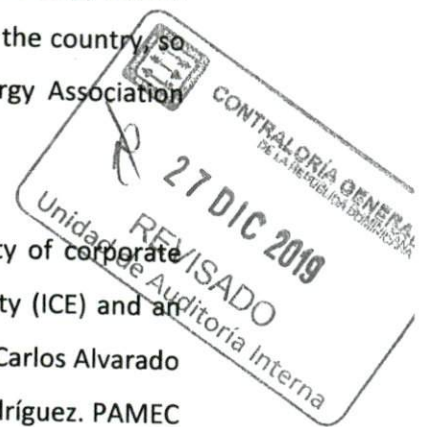
### CONFERENCE WORKSHOPS, AND EVENTS

We are holding workshop on best practices and experience from marine renewable energy research and test centers, the state of knowledge on environmental impacts and planning tools at University of Costa Rica from Friday January 24, 2020 to Saturday January 26, 2019. On Sunday January 27, there will be Canada sponsored lunch and learn in San Jose, and after the Conference on the afternoon of January 28<sup>th</sup> there will be a site tour at the University of Costa Rica, and several technical workshops. A visit to Costa Rica Renewable Energy sites is also planned for Wednesday January 29<sup>th</sup> in the Liberia, Guanacaste area of the country, so please make plans accordingly. To keep up to date, join the PAMEC.Energy Association Newsletter.

The Pan American Marine Energy Conference has been declared an activity of corporate interest by Costa Rica's energy utility, the Costa Rican Institute for Electricity (ICE) and an event of national interest by the President of the Republic of Costa Rica, Mr. Carlos Alvarado Quesada and his Minister of Environment and Energy, Mr. Carlos Manuel Rodríguez. PAMEC 2020 also has been recognized as part of our country brand *essential* Costa Rica. That's how our small economy presents itself to the world, holistically promoting tourism, investment, research, innovation, culture and uniqueness.

**Welcome to PAMEC 2020, Welcome to Costa Rica the country of renewable energy and sustainable electricity.**

NOTE: This Program is in Draft form – and note the placement of the presentations is tentative as the review process has not been completed.



**PAGADO**  
 19 DIC 2019 TR-E- 0 0 0 1 9 6  
**GERENCIA DE CONTABILIDAD**

## PRE-CONFERENCE – WORKSHOPS

**Note: Workshop is optional, and attendance is limited**

### Friday, January 24, 2020

Workshop I: Marine Renewables Research and Test Centres – Sharing Experience and Best Practices

#### Key Participants:

- ▶ Tony Wright and Dr. Dan Hassleman, Fundy Resource Centre for Energy (Canada)
- ▶ Rob Flynn and Caitlin Long, European Wave and Tidal Centre (UK)
- ▶ Valeria Chávez Cerón, Universidad Nacional Autónoma de México (Mexico)
- ▶ Dr. Segen Estefen, COPPE - Universidade Federal do Rio de Janeiro (Brazil)
- ▶ Dr. Andrea Copping, Pacific Northwest National Labs (USA)
- ▶ Dernis Mediavilla, MERIC (Chile)
- ▶ Dr. Georges Govaere, University of Costa Rica (Costa Rica)
- ▶ Julio Rojas, Technological Institute of Costa Rica (Costa Rica)

#### Agenda

- 13:00 Transport to leave from Crown Plaza Hotel for campus of University of Costa Rica Engineering Campus (San Pedro, San José, Costa Rica)
- 13:30 Workshop begins
- 15:30 Coffee break provided by UCR
- 16:00 Workshop continues
- 17:00 Workshop ends: Group transport to Restaurant in area of Avenida 7, San Jose Costa Rica at participant own cost
- 19:30 Return to Hotel at participant own cost

### Saturday, January 25, 2020

Workshop II: Environmental Impacts and Mitigation for Marine Renewables – Dr. Andrea Copping.  
Planning for Marine Renewables – Experiences with Mapping with experts.

#### Key Participants:

- ▶ Dr. Andrea Copping, Pacific Northwest National Labs (USA)
- ▶ Steve Sandford, Nova Scotia Department of Energy and Mines (Canada)
- ▶ Dernis Mediavilla, MERIC (Chile)
- ▶ Natalie Rojas and Isa Walker, AQUATERA (UK)
- ▶ Meghan Swanburg, ACADIA University (Canada)
- ▶ Bernardo Aguilar, Fundación NEOTROPICA (Costa Rica)
- ▶ Jorge Jiménez, MARVIVA Foundation (Costa Rica)

- 8:00 Transport to leave from Crown Plaza Hotel for campus of University of Costa Rica Engineering Campus (San Pedro, San José, Costa Rica)
- 8:30 Workshop begins
- 10:00 Coffee break provided by UCR
- 10:30 Workshop continues
- 12:00 Workshop ends and lunch provided by UCR
- 13:00 Group transport into San Jose at participant own cost – suggested visit to museums in San Jose





## DAY 1 - SUNDAY JANUARY 26, 2020

### Canada Luncheon

12:00 – 14:30

Luncheon Sponsored by Canada, featuring Canadian experience with Marine Renewable Energy at Crown Plaza Hotel, hosted by Canada's Ambassador to Costa Rica.

### Conference Opening

15:00 – 16:30

#### SESSION I ROUNDTABLE

- Opening Plenary and Welcome  
Ms. Eng. Irene Cañas D., Executive President, Costarrican Institute for Electricity  
Mr. Carlos Manuel Rodríguez the Minister of Environment and Energy
  
- ▶ Marine Energy and the Blue Economy – a Regional Perspective of Developments and Opportunities
  - Brazil - Segen F. Estefen, Professor Ocean Structures and Subsea Engineering
  - Costa Rica Ms. Haydée Rodríguez and Vice-Minister of Water and Seas, Ministry of Environment and Energy, Costa Rica
  - Canada, Elisa Obermann, Executive Director Marine Renewables Canada
  - Irene Penesisor Mark Hemer, Co-Chairs of AWTEC 2020
  - Other countries TBD

16:30 – 18:00

#### COFFEE BREAK FOR GENERAL PARTICIPANTS

#### CLOSED LEADERSHIP ROUNDTABLE EVENT FOR OFFICIALS

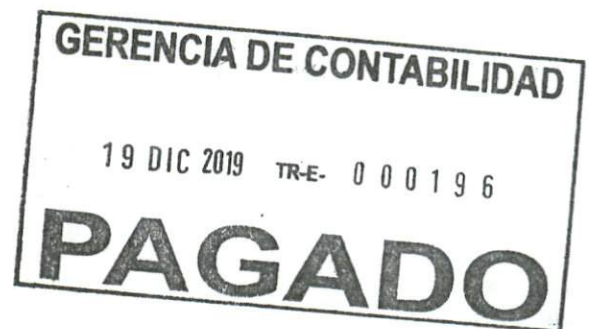
- Political and Policy Leadership Roundtable
  - ▶ Participants invited by Government of Costa Rica: *Americas Industry and policy leaders*

18:00 – 18:30

- **Roundtable Leadership Announcement and Media Availability**

18:30 – 20:30

- **Evening Reception and Meet-&-Greet**



## DAY 2 – MONDAY JANUARY 27, 2020

8:30– 9:15

### SESSION IA–GLOBAL PERSPECTIVES ROUNDTABLE

- ▶ Plenary Session
  - Conference Welcome - Mr. Rolando Castro, Vice-Minister of Energy, MINAE, Costa Rica
  - KEYNOTE ADDRESSES: The Global Perspective
    - The Future for Renewables – Invited IRENA Speaker
    - The Future for Marine Energy – Professor Abu Bakr S Bahaj, Executive Board EWTEC
    - Connecting Marine Renewables to a Blue Economy - Irene Penesisor Mark Hemer, Co-Chairs of AWTEC 2020

9:15 – 10:15

### SESSION II–ROUNDTABLE

#### Setting the Scene – Resources, Environment & Technologies Roundtable

- ▶ Opening Roundtable (:30)
- ▶ Overview on State of Knowledge and Experience
- ▶ Invited Speakers:
  - Dr. Richard Karsten (Canada) on Resources,
  - Dr. Andrea Copping (USA) on Environment,
  - Prof. Cameron Johnstone (UK) Conventional Technologies – Tidal
  - Dr. Jochem Webber (USA) Conventional Technologies - Waves
  - Dr. Diego Acevedo– OTEC
  - Speaker TBD unconventional – Floating Offshore Wind



10:15 – 10:45  
COFFEE BREAK

10:45 – 12:15

### SESSION II.a 1st of 2 Concurrent Sessions

- ▶ Resource Assessment – (1:30)
- ▶ Session Chair TBD



|                           |            |  |
|---------------------------|------------|--|
| Georges Govaere           | Costa Rica | Wave characteristics on the Pacific coast of Costa Rica for energy production            |
| Henry Alfaro Chavarria    | Costa Rica | Approaching the wave energy potential in a coastline section of the Nicoya peninsula     |
| Francisco J Ocampo-Torres | Mexico     | Wave power resource assessment in Northeast México                                       |
| Emiliano Gorr             | Mexico     | Evaluation of Wave Energy Extraction in a Sheltered Bay                                  |
| Héctor García Nava        | Mexico     | Wave power availability in the Pacific of Mexico and Central America                     |
| Dr. Gabriel Garcia Medina | USA        | High-resolution Wave Hindcasts for Resource Characterization in the U.S. Pacific Regions |

## SESSION II.b 2nd of 2 Concurrent Sessions

- ▶ Environmental Impacts (1:00)
- ▶ Session Chair: Ingo Werthmann, University of Costa Rica, Marine Research

|                   |        |   |
|-------------------|--------|---|
| Craig Chandler    | Canada | Environmental Monitoring of a Floating Tidal Energy Converter in the Bay of Fundy |
| María Figueroa    | Mexico | Environmental impacts of energy ocean devices: Life Cycle Analysis                |
| M. Luisa Martínez | Mexico | What do we know about the potential impact of ocean energy in the environment?    |

12:15 -13:15

LUNCH – Guest Speaker Dr. Jorge Jiménez, CEO of Marviva Foundations, Marine Planning

13:15 – 15:15

## SESSION II.c.1 1st of 2 Concurrent Sessions

- ▶ Technology- Waves (2:00)
- ▶ Session Chair Henry Alfaro, Engineering Department, University of Costa Rica

|                       |            |  |
|-----------------------|------------|--|
| Alberto Vilar         | Argentina  | Wave Energy Converting Modules to capture the potential and kinetic energies of the waves    |
| Charles Haynes        | Canada     | Vancouver Wave Energy Testing Station: Continuous electricity output verification from waves |
| MoinMojabi            | Canada     | Assessment of the INWAVE WEC-Hybrid PTO Technology in the Canadian Pacific Coast             |
| AdriánHernández       | Costa Rica | e.Wave: Maximization of wave energy using an adaptative mechanical system                    |
| Melissa Jaramillo     | Mexico     | Numerical study of the effect of a flap-type Wave Energy Converter                           |
| Eduardo SantiagoOjeda | Mexico     | Electrohydrodynamics for a point absorber WEC: theoretical foundation                        |
| Galavan-Pozos         | Mexico     | Dynamic analysis of a novel six degrees of freedom device for wave energy extraction         |
| Yi-Hsiang Yu          | USA        | Review of WEC-Sim Development and Applications   |
| Blake Boren           | USA        | Modeling Flexible Ocean Wave Energy Converters with Distributed Power Take-off Systems       |

## SESSION II.c.1 2nd of 2 Concurrent Sessions

- ▶ Technology – Tidal (1:00)
- ▶ Session Chair Julio Rojas, Technologic Institute of Costa Rica

|                      |                |  |
|----------------------|----------------|--|
| Dominic Groulx       | Canada         | Understanding Transient Load on Turbine Blades to Reduce Risks |
| Ralf Starzmann       | Canada/Germany | Development and Testing of a Tidal Turbine Blade               |
| Penny Jeffcoate      | Canada/UK      | Floating Tidal Energy Platform PLAT-I                          |
| Jean Christophe Allo | France         | From demonstration to commerciality: three stages              |

- ▶ Technology – Tools (:45)
- ▶ Session Chair TBD

|                    |     |  |
|--------------------|-----|--|
| Peter Scheijgrond  | EU  | How international standardization and certification can accelerate commercial uptake |
| Frederick Driscoll | USA | Marine HydroKinetic Tools - MHKIT  |
| Robert Raye        | USA | Modular Ocean Data Acquisition System - MODAQ  |



**PAGADO**

19 DIC 2019 TR-E- 0 0 0 1 9 6

**GERENCIA DE CONTABILIDAD**

15:15 – 15:45

COFFEE BREAK

15:45 – 17:30

### SESSION II.c.2 – 1st of 3 Concurrent Sessions

- ▶ Technology – Ocean Thermal Energy Current (1:45)
- ▶ Session Chair TBD Dr. Rodolfo Silva Casarín, CEMEI-Océano, México

|                         |             |   |
|-------------------------|-------------|---|
| Antonio Jarquin Laguna  | Netherlands | Tidal energy for hydrogen production through reversible solid oxide cells                   |
| Diego Acevedo           | Aruba       | Case Study of OTEC developments in the Caribbean: Economics, plant sizing and challenges    |
| Jessica Arias Gaviria   | Columbia    | Adoption of Deep Ocean Water Technologies: Sustainable Development in the Caribbean         |
| Leslie Marlen Navarrete | Mexico      | Analysis of the performance and efficiency of an OTEC turbine through a simulation program. |
| Paola Garduno           | Mexico      | Criteria for the selection of optimal sites for OTEC plants in the Mexican Pacific          |
| Alexander Garcia Huante | Mexico      | Possible oceanographic and biological effects due to the operation of an OTEC plant         |
| David Soriano           | Mexico      | Design of a prototype of a 1kWe open-cycle mareothermal (OTEC) plant                        |
| Guillermo Lopez         | Panama      | Evaluation of the Oceanic Thermal Potential on the Coasts of Panama                         |

### SESSION II.c.2 – 2 of 3 Concurrent Sessions

- ▶ Technology and Resources – Floating Offshore Wind (1:45)
- ▶ Session Chair TBD

|                       |            |  |
|-----------------------|------------|--|
| Marianella Bolivar    | Columbia   | Wind potential and methodological guide for installation of floating offshore wind farm      |
| Mariana Montenegro    | Costa Rica | Considerations for Offshore Wind Turbine Design in the North Pacific of Costa Rica           |
| Gallardo Brigido J.C. | Mexico     | Bathymetry and capacity factor study in areas of the Gulf of Baja California Mexico          |
| Wilfredo Segura       | Costa Rica | Multicriteria analysis base on SIG for offshore wind power potentials sites in North Pacific |
| Kenneth Lobo          | Costa Rica | Determination of offshore wind power potential in Costa Rica                                 |

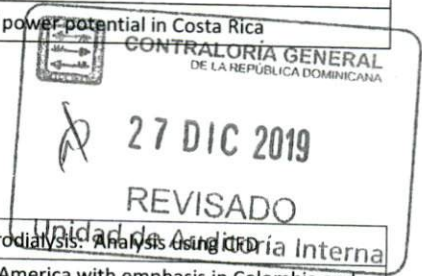
### SESSION II.c.2 – 3 of 3 Concurrent Sessions

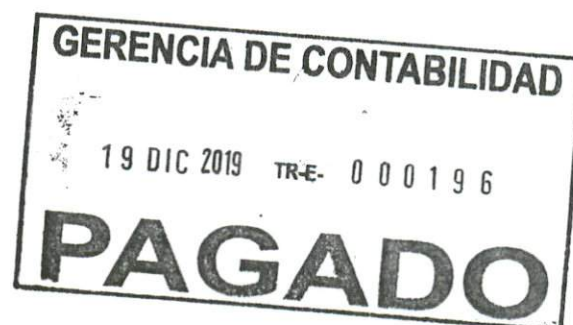
- ▶ Technology – Salinity Gradient (1:00)
- ▶ Session Chair TBD

|                           |          |  |
|---------------------------|----------|--|
| Mateo Roldan Carvajal     | Columbia | Pressure drop in Reverse Electrodialysis: Analysis using CFD                             |
| Oscar Alvarez-Silva       | Columbia | Salinity gradient energy potential in Latin America with emphasis in Colombia and Mexico |
| Karen Vázquez Morales     | Mexico   | Determination of the saline gradient in the coastal zone of the Mexican Caribbean        |
| Alexandro Martinez Flores | Mexico   | Hydrodynamic analysis of a reverse electrodialysis device                                |
| Alexandro Martinez Flores | Mexico   | Optimization and construction of a reverse electrodialysis device                        |
| Mateo Roldan Carvajal     | Columbia | Pressure drop in Reverse Electrodialysis: Analysis using CFD                             |

18:30 – 22:30

Dinner

  
 CONTRALORÍA GENERAL  
 DE LA REPÚBLICA DOMINICANA  
 27 DIC 2019  
 REVISADO  
 Unidad de Asesoría Interna

  
 GERENCIA DE CONTABILIDAD  
 19 DIC 2019 TR-E- 0 0 0 1 9 6  
**PAGADO**

## DAY 3 - TUESDAY JANUARY 28, 2020

8:30-10:00

### SESSION III - ROUNDTABLE

- ▶ Integrating Marine and Other Renewables Solutions into an Electricity Grid
- ▶ Opening Roundtable (:30)
- ▶ Invited Speakers:
  - Mr. Eng. Marco Acuña, Corporate Director of Energy, Costarrican Institute for Electricity
  - Eng. Javier Orozco, Director of Planning and Energy Development, ICE
  - Dr. Gustavo Richmond, Costarrican Technological Institute.
  - Others TBD

### SESSION III.a (1:00)

- ▶ Micro-Grid Technologies and Solutions
- ▶ Session Chair Dr. Rolando Madriz, UNA-Renovables, National University of Costa Rica

|                       |        |  |
|-----------------------|--------|--|
| Martin Moody          | Canada | Design Process for a Microgrid Central Controller in Remote Communities                          |
| Abissaid Martinez     | Mexico | The development of materials to reduce costs in the integration of hydrogen as renewable energy. |
| Dhruv Bhatnagar       | USA    | Island and Remote Grid Considerations for Marine Energy Development                              |
| Jorge Olmedo-González | Mexico | The Influence of Hybrid Renewable Energy Systems on Energy Storage                               |



10:00 – 10:30

COFFEE BREAK

10:30 – 11:15

### SESSION VI ROUNDTABLE Social, Environmental and Economic Issues

- ▶ Opening Roundtable (:45)
- ▶ Overview on State of Knowledge and Experience
- ▶ Invited Speakers:
  - Financing Renewable Energy – Invited Speaker from World Bank
  - Building Social Support - Ms.ZdenkaPiskulich, CEO of Costa Rica X Siempre Foundation (confirmation has been requested)
  - Ms. Virginia Cajiao, National University, Heredia. (confirmation has been requested)
  - Others TBD



11:15 – 12:45

### SESSION VI.a – 1 of 2 Concurrent Sessions

- ▶ Building the Social and Policy Support for Marine Renewables - (1:00)
- ▶ Session Chair: Sandra Farwell, Nova Scotia Department of Energy and Mines,

|                  |        |   |
|------------------|--------|---|
| Steve Sanford    | Canada | Governance of Marine Renewable Energy Development In Nova Scotia, Canada                        |
| DernisMediavilla | Chile  | MERIC: supporting the development of MRE in Chile   |
| Isa Walker       | UK     | Lessons learned for Marine renewable energy development in Chile, Peru and Colombia             |
| Rebecca Green    | USA    | Powering the Blue Economy: Marine Energy for Enabling Applications including Ocean Observations |

|                |        |   |
|----------------|--------|---|
| Caitlin Long   | UK     | SEA Wave: Addressing the long-term environmental concerns associated with wave energy |
| Andrea Copping | USA    | The Road to Risk Retirement: Evaluating and Communicating Environmental Risks         |
| Norval Collins | Canada | Coastal Energy Development - Recent Canadian Experiences                              |

### SPECIAL SESSION 2nd of 2 Concurrent Sessions

- ▶ Tidal Opportunities in Mexico (1:00)
- ▶ UK-Mexico Research Project Dissemination Seminar
- ▶ Session Chair: Prof. Cameron Johnstone, Strathclyde University
  - Tidal energy resource in Mexico, with overview of technology to extract the energy, including lessons learned and funding opportunities to work with Latin-American countries.

12:45-13:00

LUNCH KEYNOTE - TBD

13:00 -13:45

LUNCH

13:45-14:30

### SESSION VII –ROUNDTABLE: DO WE HAVE MOMENTUM?

- ▶ Building Student Connections
  - COMITÉ ESTUDIANTIL DEL CEMIE-OCÉANO
- ▶ Closing Panel Dialog on Value of PAMEC
  - Chair Tattiana Hernández-Madrigal, VP PAMEC.Energy Association
  - Panelists
    - Bruce Cameron, President PAMEC.Energy Association
    - Dr. Rodolfo Silva Casarín, CEMIE-Oceano
    - Dr. José Rodrigo Rojas Morales, ICE



14:30

### SITE VISIT AND TECHNICAL WORKSHOPS

- ▶ Bus leaves for UCR
- ▶ Bus leaves UCR for hotel at 18:00

15:00

- ▶ Visit to New Marine Lab in the Recently Inaugurated Engineering Facilities at the University of Costa Rica
- ▶ Technical Workshops at the University
  - TCC-114 Technical Session Case Study
    - Exploring Technical Standards for OTEC
  - Smart Grid Workshop

18:30

### PAMEC.Energy Association Members Meeting

- Crown Plaza Hotel – Room TBD

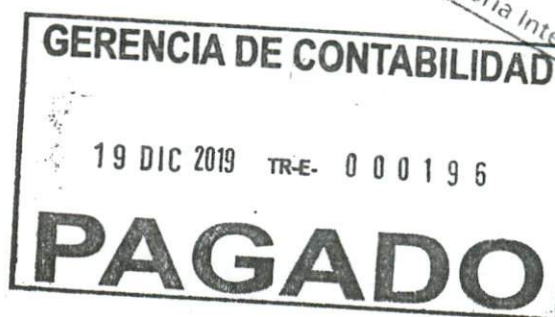




## POST CONFERENCE - WEDNESDAY JANUARY 29, 2020

### OPTIONAL ACTIVITIES

- ▶ Technical visit to Power Plants (Cluster of Renewable Energy, North Sector of the Country – near Liberia)
- ▶ Technical Workshops – Topics TBD





SUPERINTENDENCIA DE ELECTRICIDAD  
"Garantía de todos"  
"Año de la Innovación y la Competitividad"

SIE-I-DRH-DIR-2019-0821

FECHA : 29 de noviembre de 2019  
A : CONSEJO SIE  
VÍA : PAULINA SANTANA, Secretaria Consejo  
ASUNTO : Solicitud Aprobación de Conferencia

SECRETARIA DEL CONSEJO  
RECIBIDO  
Hora: 12:35 PM  
Fecha: 4/12/2019  
Por: [Signature]

LA DIRECCION DE RECURSOS HUMANOS, Solicita su aprobación para la participación en la "Conferencia Panamericana de Energía Marina PAMEC 2020, Costa Rica" para las empleadas detalladas a continuación, bajo la consideración del CONSEJO de esta SUPERINTENDENCIA DE ELECTRICIDAD

|                      |   |
|----------------------|---|
| Empleados:           | Dolly Dahiana Cruz Cruz Taveras y Laura Mirian Jones Nadal          |
| Programa:            | "Conferencia Panamericana de Energía Marina PAMEC 2020, Costa Rica" |
| Impartido por:       | CECACIER  |
| Inicio del Programa: | Del 27 AL 29 ENERO DE 2020  |
| Costo del Programa   | US\$365   |

CONTRALORIA GENERAL  
DE LA REPUBLICA DOMINICANA  
27 DIC 2019  
REVISADO  
Unidad de Auditoría Interna

Atentamente,

[Signature]  
**Marcia Rijo Reyes**  
Gerente Adtva. RR/HH  
MRR/pr



GERENCIA DE CONTABILIDAD  
19 DIC 2019 TR-E- 0 0 0 1 9 6  
**PAGADO**





SUPERINTENDENCIA DE ELECTRICIDAD

"Garantía de todos"

"Año de la Innovación y la Competitividad"

SIE-I-DL-UAUT-2019-0112

27 de noviembre de 2019

Señores  
**MIEMBROS CONSEJO SIE**  
Superintendencia de Electricidad  
Sus despachos.

**Vía:** DIRECCIÓN DE RECURSOS HUMANOS SIE.

**Asunto:** Solicitud aprobación de Conferencia Panamericana de Energía Marina.

Distinguidos señores:

Por la presente, sometemos para su evaluación y consideración, conforme a la Política Promoción de Estudios, en su Categoría "A", la participación en la Conferencia "PAMEC 2020 COSTA RICA", a ser impartida por PAMEC ENERGY ASSOCIATION (MIEMBRO DE CECACIER), del 27 al 29 de enero de 2020 (con talleres preliminares desde el día 24 enero de 2020), de nuestras colaboradoras **DOLLY DAHIANA CRUZ TAVERAS** y **LAURA MIRIAM JONES NADAL**.

Nuestra solicitud se encuentra motivada en lo que representa la participación de nuestras colaboradoras en dicha Conferencia, toda vez que las mismas podrán adquirir conocimientos importantes en la tecnología de energías renovables, específicamente en energía minera, lo cual contribuiría en el desarrollo de sus funciones diarias en la Unidad de Autorizaciones y Concesiones de esta Dirección Legal, así como de cara a la aplicación de la normativa existente sobre Energías Renovables (LEY No. 57-07) que deja abierta la posibilidad de generación a partir de este tipo de energía, así como para regulaciones futuras que pudieran surgir al respecto.

Anexo adjuntamos el programa que se agotaría, así como el presupuesto asignado a esta Dirección Legal para capacitación correspondiente al año 2020.

Sin otro particular, queda de Vds.

Atentamente

**EDWARD J. BARETT ALMONTE**  
Director Legal SIE

Anexos:

- 1) Programa de la Conferencia.
- 2) POA 2020 de la Dirección Legal.

