2018 WESTERN TRANSMISSION SUMMIT
From Expansion to Modernization – Addressing the Changing Landscape of Transmission Planning and Investment

June 11-12, 2018
Sheraton Denver Downtown Hotel
Denver, CO

Featuring a Tour of NREL’s Systems Integration Facility

POST-CONFERENCE WORKSHOP
Overcoming Transmission Permitting & Siting Challenges
TUESDAY, JUNE 12, 2018

EUCI is authorized by IACET to offer 0.9 CEUs for the conference, 0.3 CEUs for the workshop
OVERVIEW

The 10th annual Western Transmission Summit will address transmission investment trends and concerns with planning, permitting and siting. At this summit, you’ll join top transmission leaders and regulators in discovering opportunities in transmission development, challenges causing project delays due to complex permitting and siting processes, and the latest regional transmission projects.

LEARNING OUTCOMES

- Explore future drivers of transmission investment
- Minimize challenges and delays due to complex infrastructure approval process in the western region
- Discuss complex transmission planning, siting and market structure issues with industry thought leaders
- Analyze evolving transmission incentive policies
- Identify the critical role of transmission infrastructure in Clean Power Plan (CPP) implementation and its impact on reliability of the bulk electric system
- Hear transmission leaders reveal the inside details of major transmission projects in the region, in an exclusive project showcase session.

2018 SUMMIT HIGHLIGHTS

- FIVE Robust Keynotes
- Transmission Leaders Roundtable
- Regulators Roundtable
- FOUR Regional Transmission Projects Showcased
- NREL’s Systems Integration Facility Tour

“EUCI provides a small conference format that enables easy networking and free-flow discussions. It is also nice to not be pressured by vendors or sponsors. It is great in its informality of venue.”

Manager, Grid Integration, NREL

“EUCI serves as a sounding board/forum to share best practices and information that effects anyone related to energy, no matter what their level of involvement. The cumulative experience of event attendees is astounding, and information shared is invaluable.”

Director of Business Development, PJ Helicopters, Inc.
FEATURING RENOWNED SPEAKERS

KEYNOTE SPEAKER
Robert Ross
Vice President, Transmission Development, TransCanyon

Catherine Jereza
Deputy Assistant Secretary, Transmission Permitting & Technical Assistance, U.S. Department of Energy (DOE)

Daniel J. Rogier
VP, Transmission Asset Strategy & Policy, American Electric Power

Jonathan Abebe
Director, Transmission and Engineering, Clean Line Energy Partners LLC

Amanda Ormond
Managing Director, Western Grid Group

John Romero
General Manager of Energy Acquisition, Engineering & Planning, Colorado Springs Utilities

Mark D. Milburn
Vice President, LS Power Development, LLC

Robert Smith
Vice President, Transmission Development, TransCanyon

Mark A. Davidson
Director, Fairfield and Woods P.C.

Edward Randolph
Energy Division Director, California Public Utilities Commission

REGISTER TODAY! CALL 303-770-8800 OR VISIT WWW.EUCI.COM
AGENDA

MONDAY, JUNE 11, 2018

8:00 – 8:30 am   Registration & Continental Breakfast

8:30 – 8:45 am   Opening Remarks by Chairperson

8:45 – 8:55 am   Guest of Honor’s Speech
FERC’s latest initiatives in ensuring electric transmission investment incentives align with need, project grid reliability and resilience, and defend against ever-changing cyber threats.
Robert Ross, Legal Advisor, Office of Commissioner Chatterjee, Federal Energy Regulatory Commission

8:55 – 9:15 am   Managing Changing Dynamics of Transmission Development
This session will examine how an expanded EIM and Western ISO will affect future transmission development in the Western region.
Catherine Jereza, Deputy Assistant Secretary, Transmission Permitting & Technical Assistance, U.S. Department of Energy (DOE)

9:15 – 9:45 am   Rebuilding our Electric Transmission Grid for our Energy Future
A significant portion of the U.S. electric transmission grid was built in the early to mid-part of the last century to meet the nation's energy needs at that time. Our nation's energy needs have shifted dramatically since that time and the electric transmission grid must now support a diverse set of energy resources, be able to withstand more frequent and severe weather events, be protected from sophisticated physical and cyber security threats and meet higher customer reliability and resilience requirements. Consequently, replacement of assets whose performance and condition pose a significant risk to meeting our current and future energy needs is vital. Against this backdrop, this session will look into:
• Regional challenges
• Aging infrastructure
• Value of transmission
Daniel J. Rogier, VP, Transmission Asset Strategy & Policy, American Electric Power

9:45 – 10:15 am  Update on Mountain West Transmission Group (MWTG)
• MWTG efforts to-date and status on joining RTO
• MWTG analyses
• MWTG’s timeline
• MWTG going forward
John Romero, General Manager of Energy Acquisition, Engineering & Planning, Colorado Springs Utilities

10:15 – 10:45 am  How Market Development in the West will Affect Transmission Development?
The resources that will power the electric grid in the future will be significantly different than those of the past. If the role of transmission is to move power from where it is produced to where it is needed, how will a changing resource mix affect what we build, where we build it and how we pay for it? This presentation will explore future conditions and questions we should be asking now to minimize future risk.
Amanda Ormond, Managing Director, Western Grid Group

10:45 – 11:15 am  Networking Break – Sponsored by Terracon

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AGENDA

MONDAY, JUNE 11, 2018 (CONTINUED)

11:15 am – 12:00 pm  Regulators Roundtable
In this session, regulators will discuss their viewpoints on some of the current transmission development challenges.
- Regulators Perspective: Reliability implications of Clean Power Plan (CPP) implementation.
- FERC 1000 – what are the lessons learned so far?
- Discuss Inter-regional transmission coordination
- What is driving the potential CAISO expansion?

Panelists:
Robert Ross, Legal Advisor, Office of Commissioner Chatterjee, Federal Energy Regulatory Commission
Edward Randolph, Energy Division Director, California Public Utilities Commission
Catherine Jereza, Deputy Assistant Secretary, Transmission Permitting & Technical Assistance, U.S. Department of Energy (DOE)

12:00 – 12:30 pm Synchronous Condenser Conversion – A Cost Effective Alternative for Improved Grid Reliability
- Summary of Grid Challenges
  - Addition of renewables to the grid
  - Large Fossil Plant Closures
- Technologies to Address Grid Challenges – Pros, Cons, and Costs
  - New transmission lines
  - Capacitor bank(s)
  - Static VAR compensator
  - Synchronous condenser
- Case Study
  - Grid location
  - Need
  - Alternatives
  - Synchronous condenser conversion
  - Schedule
  - Budget
  - Outcome

Christopher Mascaro, General Manager, Engineered Systems, ElectroMechanical Engineering Associates (EME)
Jess Yenter, Project Engineer, Eaton Corporation

12:30 – 1:30 pm Group Luncheon

1:30 – 2:30 pm Transmission Leaders Roundtable
In this session, transmission executives will discuss challenges, opportunities in transmission development.
- Discuss financing structure and future drivers of transmission investment
- Developer’s perspective: Impact of Clean Power Plan (CPP) on reliability of the bulk electric system
- What are the benefits and disadvantages to an expanded Western ISO?
- Discuss current transmission reliability initiatives and updates

Panelists:
Robert Smith, Vice President, Transmission Development, TransCanyon
Mark D. Milburn, Vice President, LS Power Development, LLC
Amanda Ormond, Managing Director, Western Grid Group
Christopher Mascaro, General Manager, Engineered Systems, ElectroMechanical Engineering Associates (EME)
AGENDA
MONDAY, JUNE 11, 2018 (CONTINUED)

**NREL’s Systems Integration Facility Tour**
*(Limited to 30 participants, Add-on the Tour during your registration)*

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<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>2:30 pm</td>
<td><strong>Bus Departs to NREL’s Facility from Conference Venue Hotel</strong></td>
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<tr>
<td>3:00 pm</td>
<td><strong>Security Check-In at NREL</strong></td>
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<tr>
<td>3:30 pm</td>
<td><strong>Tour of NREL Energy Systems Integration Facility</strong></td>
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<tr>
<td>5:15 pm</td>
<td><strong>Bus Departs NREL Back to Conference Venue Hotel</strong></td>
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*Important: All conference attendees planning to participate in the NREL tours must register for the program no later than end of business on May 18, 2018. Attendees who register later than this time **WILL NOT** be eligible to participate in the NREL tour portion of the conference.*

All visitors who wish to participate in an NREL onsite tour must agree to the following guidelines/regulations:

- Each guest must have a valid government issued photo I.D. (such as a driver’s license). If you are a U.S. citizen, this is all the identification required to gain access to NREL Facilities. There is no exception to this rule. If you are a non-U.S. citizen (Canadian, permanent resident alien or resident aliens are included in this category), you will need to contact the NREL Visitors Program fifteen business days in advance to complete a foreign national data card. If you have already completed a foreign national data card, please refer to your confirmation e-mail for the necessary identification you will need to bring with you the day of your visit (typically your visa and passport).

- All tour registrants must be the minimum age of 18 years old in order to join the tour. No children under the age of 18 are allowed. Pets are not allowed on the grounds. Remember to wear comfortable walking shoes. Sandals, flip flips, open toe shoes or sling back shoes are not allowed in NREL laboratories. Shorts are not allowed in NREL laboratories, remember to wear long pants. Water bottles or other liquids are not allowed in NREL laboratories.

- Follow the instructions of your NREL host and security personnel at all times – especially in case of sounding alarms or other emergencies. Any vehicle brought onto the NREL site is subject to search at all times. The following items are prohibited on all NREL sites: Firearms or explosives, dangerous weapons or materials. The onsite speed limit is 25 miles per hour (mph), except where otherwise posted.

Using portable electronic devices of any kind—including mobile phones, Blackberrys, and iPods/mp3 players—while operating a motor vehicle or bicycle is prohibited while on NREL’s South Table Mountain campus and National Wind Technology Center.

“Great list of speakers and topics. Very relevant and timely.”

Regional Public Affairs Manager, SDG&E
AGENDA
TUESDAY, JUNE 12, 2018

8:00 – 8:30 am  Continental Breakfast

8:30 – 8:45 am  Opening Remarks by Chairperson

Regional Projects Showcase

8:45 – 9:15 am  Interregional Transmission Project - Cross-Tie 500kV Transmission Project
The Cross-Tie Transmission Line is a proposed 500-kilovolt (kV) line connecting PacifiCorp’s proposed Clover 500-kv substation in central Utah and NV Energy’s existing Robinson Summit 500-kV substation in eastern Nevada. The 213-mile line would go into service in late 2024. The line will increase transmission capacity, improve reliability, enhance flexibility and provide more access to a wider pool of renewable energy across the region.

Robert Smith, Vice President, Transmission Development, TransCanyon

9:15 – 9:45 am  Interregional Transmission Project - SWIP North
SWIP-North is a proposed 2,000 megawatt (MW), 275-mile, 500 kV single circuit overhead AC transmission line that will complete a critical link between the California ISO and the rest of the Western Grid. SWIP-North represents the 3rd and final phase of the 566 mile, 500 kV Southwest Intertie Project (SWIP) corridor developed by LS Power to enable access to premium renewable resources and EIM opportunities with the flexibility to address over-generation, renewable integration and congestion issues.

Mark D. Milburn, Vice President, LS Power Development, LLC

9:45 – 10:15 am  Cost Allocation & Cost Recovery - Western Spirit Clean Line Project
The Western Spirit Clean Line is a New Mexico energy infrastructure project that will enable substantial wind energy development, create hundreds of jobs and provide revenue for local communities. The 140-mile electric transmission line will gather wind energy from the wind-rich central region of New Mexico and deliver approximately 1,000 megawatts (MW) of power to the existing electric grid in northwestern New Mexico. The Western Spirit Clean Line will facilitate new, low-cost wind generation that could not otherwise be built due to lack of transmission capacity.

Jonathan Abebe, Director, Transmission and Engineering, Clean Line Energy Partners LLC

10:15 – 10:45 am  Networking Break – Sponsored by Terracon

10:45 – 11:15 am  Zephyr Power Transmission Project
Zephyr Project is an HVDC transmission line project that interconnects very rich wind resources in eastern Wyoming to the large renewable energy market in California.

Speaker to be announced soon

11:15 – 11:45 am  Leaders Dialogue – An Interactive Q&A Session on Above Projects

11:45 am – 12:00 pm  Closing Remarks & End of Conference

REGISTER TODAY! CALL 303-770-8800 OR VISIT WWW.EUCI.COM
POST-CONFERENCE WORKSHOP

Overcoming Transmission Permitting & Siting Challenges

TUESDAY, JUNE 12, 2018

1:00 – 1:30 pm   Registration
1:30 – 5:00 pm   Workshop Timing (30 mins networking break included)

OVERVIEW

In this workshop, participants will discuss the interactions of Federal, State and Local jurisdictions in transmission siting. We will address permitting issues at all three levels of government including environmental and tribal issues. Obstacles such as landowner requirements, conservation easements, health effects, noise, electromagnetic fields, wetlands and jurisdictional siting requirements will be included.

Several case studies will serve as the backdrop for the discussion. These will include consideration of the principle of “prudent avoidance”, landowner concerns with visual impacts, the potential interaction of transmission lines with natural gas transmission facilities, noise issues as a result of weather impacts, among others.

A robust discussion surrounding the creation of the Mountain West Transmission Group and its efforts to develop a regional transmission organization (RTO) in the Rocky Mountain region will be held. The stakeholders involved in the interconnection of utility transmission owners with the Southwest Power Pool (SPP) will be analyzed and their respective transmission needs considered in conjunction with the creation of the RTO. State regulatory approvals in conjunction with Federal Energy Regulatory Commission (FERC) will be reviewed in “real time” as the formation of this RTO proceeds through the regulatory approval process in 2018.

Lastly, in the wake of changes in perspective at the federal level regarding the decreased emphasis on renewable energy, will states continue their current efforts to increase the use of renewables and what impacts will the addition of more intermittent resources have on transmission needs? Will energy storage opportunities moderate transmission impacts from renewables and at what level?

LEARNING OUTCOMES

• Identify resources and initiatives designed to streamline and facilitate efficient siting process
• Review intertwined policy transformations – permitting efficiency and mitigation
• Identify opportunities to develop interregional collaboration
• Effectively manage public sentiment – landowner fatigue, landowner’s request for annual payment, royalties etc.
• Analyze evolving tactics of transmission project opponents
• Overcome challenges to certification of need, land use approvals, and land rights acquisition
AGENDA

• Trans West RTO
• Prudent Avoidance – Still a viable principle?
• San Luis Valley, CO Transmission Line Effort – How one landowner derailed a major transmission addition intended to accommodate renewable resources
• Interaction Between Transmission Lines and Natural Gas Facilities
• Aesthetics in Transmission Siting – Noise, visual impacts, property values

WORKSHOP INSTRUCTOR

Mark A. Davidson
Director, Fairfield and Woods P.C.

Mark has extensive regulatory experience representing investor owned and cooperative electric utilities, natural gas local distribution companies, their regulators, suppliers and customers. His background includes broad representation of Xcel Energy/Public Service Company of Colorado in rate cases, resource planning, certificate of public convenience and necessity applications and various other proceedings and negotiations. Mark’s experience also includes representation of Tri-State Generation and Transmission Association, Inc. in rate making and rate design matters, transmission siting issues, FERC Qualifying Facility disputes and renewable energy opportunities. Mark has also represented numerous independent power producers in the planning, development, siting and construction of their renewable energy projects, as well as negotiating purchase power agreements with the facility’s off takers. He earned his undergraduate degree from Miami University and his law degree from Ohio Northern University, Pettit College of Law.
INSTRUCTIONAL METHODS

Case studies, PowerPoint presentations and group discussion will be used in this event.

REQUIREMENTS FOR SUCCESSFUL COMPLETION

Participants must sign in/out each day and be in attendance for the entirety of the conference to be eligible for continuing education credit.

IACET CREDITS

EUCI has been accredited as an Authorized Provider by the International Association for Continuing Education and Training (IACET). In obtaining this accreditation, EUCI has demonstrated that it complies with the ANSI/IACET Standard which is recognized internationally as a standard of good practice. As a result of their Authorized Provider status, EUCI is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET Standard.

EUCI is authorized by IACET to offer 0.9 CEUs for the conference, 0.3 CEUs for the workshop,

EVENT LOCATION

A room block has been reserved at the Sheraton Denver Downtown Hotel, 1550 Court Place, Denver, CO 80202, for the nights of June 10-11, 2018. Room rates are US $239 plus applicable tax. Call 1-303-893-3333 or click here for reservations and mention the EUCI event to get the group rate. The cutoff date to receive the group rate is May 20, 2018 but as there are a limited number of rooms available at this rate, the room block may close sooner. Please make your reservations early.

REGISTER 3, SEND THE 4TH FREE

Any organization wishing to send multiple attendees to this conference may send 1 FREE for every 3 delegates registered. Please note that all registrations must be made at the same time to qualify.

SPONSORSHIP OPPORTUNITIES

Do you want to drive new business through this event’s powerful audience? Becoming a sponsor or exhibitor is an excellent opportunity to raise your profile before a manageably sized group of executives who make the key purchasing decisions for their businesses. There is a wide range of sponsorship opportunities available that can be customized to fit your budget and marketing objectives, including: Platinum, gold, or VIP Sponsor, Reception host, Networking break host, Tabletop exhibit, Workshop sponsor, Lanyard sponsor, Luncheon host and Breakfast host.

Please contact Jyothi Rajan at jrajan@euci.com or 720-988-1262 for more information.
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EUCI's Energize Weekly e-mail newsletter compiles and reports on the latest news and trends in the energy industry. Newsletter recipients also receive a different, complimentary conference presentation every week on a relevant industry topic. The presentations are selected from a massive library of more than 1,000 current presentations that EUCI has gathered during its 30 years organizing conferences.

Sign me up for Energize Weekly

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Please Select

- **SPECIAL BUNDLE PRICE: 2018 WESTERN TRANSMISSION SUMMIT AND WORKSHOP:** JUNE 11-12, 2018 : US $1895
  EARLY BIRD on or before MAY 25, 2018: US $1695

- **2018 WESTERN TRANSMISSION SUMMIT ONLY**
  JUNE 11-12, 2018: US $1495
  EARLY BIRD on or before MAY 25, 2018: US $1295

- **POST-CONFERENCE WORKSHOP ONLY**
  OVERCOMING TRANSMISSION PERMITTING & SITING CHALLENGES
  TUESDAY, JUNE 12, 2018: US $595
  EARLY BIRD on or before MAY 25, 2018: US $495

- **YES, I WOULD LIKE TO ATTEND THE OPTIONAL TOUR**
  NREL'S SYSTEMS INTEGRATION FACILITY TOUR
  MONDAY, JUNE 11, 2018: US $50 (limited to first 30 attendees)

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How did you hear about this event? (direct e-mail, colleague, speaker(s), etc.)

Print Name  Job Title

Company

What name do you prefer on your name badge?

Address

City  State/Province  Zip/Postal Code  Country

Phone  Email

List any dietary or accessibility needs here

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CREDIT CARD INFORMATION

Name on Card  Billing Address

Account Number  Billing City  Billing State

Exp. Date  Security Code (last 3 digits on the back of Visa and MC or 4 digits on front of AmEx)  Billing Zip Code/Postal Code

OR Enclosed is a check for $ to cover registrations.

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Substitutions & Cancellations

Your registration may be transferred to a member of your organization up to 24 hours in advance of the event. Cancellations must be received on or before May 11, 2018 in order to be refunded and will be subject to a US $195.00 processing fee per registrant. No refunds will be made after this date. Cancellations received after this date will create a credit of the tuition (less processing fee) good toward any other EUCI event. This credit will be good for six months from the cancellation date. In the event of non-attendance, all registration fees will be forfeited. In case of conference cancellation, EUCI's liability is limited to refund of the event registration fee only. For more information regarding administrative policies, such as complaints and refunds, please contact our offices at 303-770-8800. EUCI reserves the right to alter this program without prior notice.