



U.S. National Committee of CIGRE

**Annual Meeting
of Members**

July 18, 2017

Chicago, IL

Who Are We?

- Mission
 - “To be the world’s foremost collaborative technical reference organization for all aspects of electric power systems”.
- Vision
 - “To be universally recognized as the leading global organization for all aspects of electric power systems”.



USNC General Meeting Agenda

- | | |
|------------------------------------|---------------|
| • USNC President's Opening Remarks | D. Roop |
| • CIGRÉ Secretary General Remarks | P. Adam |
| • CIGRÉ International Update | M. Heyeck |
| • Awards & Recognition | K. Lindsey |
| • Nominations & Appointments | C. Root |
| • Treasurer's Report | C. Kelly |
| • Administrative VP Report | B. D. Russell |
| • Marketing & Membership Report | M. Beehler |
| • Next Generation Network | A. Olson |
| • Technical Activities Report | J. McDonald |
| • Future CIGRÉ and USNC Meetings | D. Roop |
| • Other Business & Discussion | USNC Members |

CIGRE Organization (2017)

- **Officers**

- President – Rob Stephen (SA)
- Treasurer – Michel Augonnet (FR)
- Technical Comm. Chair – Mark Waldron (UK)
- Secretary General – Philippe Adam (FR)

- **Steering Committee, Administrative Council**

- U.S. Rep – Mike Heyeck

A nighttime aerial view of a city, likely Chicago, with numerous lights from buildings and streets creating a bokeh effect against a dark blue sky.

Information on CIGRE activities

USNC meeting, Chicago – Sheraton Hotel, 18th July 2017

Governing
Bodies
meetings

2018
Session

2019/2021
symposia

Central
Office

Governing Bodies meetings

❑ Steering Committee: meeting Dublin – 29/05 & 30/05, 2017

Main conclusions :

- New Study Committee Chairs in 2018
- Election of the TC Chair for 2018-2022 (2024)
- Brand & marketing strategy (Task Force)
- Expanding CIGRE into the whole value chain of Electric Power Systems (Task Force)
- Preparation of the 2018 Session (opening ceremony, opening panel)
- Finances

❑ Next meetings:

- Steering Committee: Cape Town (ZA) – 6, 7 & 8 November 2017 with Technical Council
- Administrative Council meeting : Auckland (NZ) – 11 & 12 September 2017, adjacent to AORC technical meeting

USNC meeting, Chicago – Sheraton Hotel, 18th July 2017

2018 Session

- ☐ Receipt of synopses : 30 June 2017
- ☐ 16 tutorials : from Monday to Thursday in a dedicated room (380 seats); free registration
- ☐ Forum for CEOs
- ☐ Spontaneous contributions through CIGRE KMS
- ☐ Women in Engineering forum
- ☐ New APP (more features)
- ☐ Soirée: Cité de la Mode et du Design

2019/2021 symposia

- ☐ Symposium in Aalborg: « ***Going offshore – Challenges of the future power supergrid*** » with C4 (leading), B1, B2, B4, C1 and C2, from 3rd June 2019 to 6th June 2019
- ☐ Symposium in Chengdu (China): « ***Distribution including smart substations*** » with C6/B3 (leading), C5, A2, C3, D2 and B5, from 20th to 25th September 2019,
- ☐ 2021 Symposium in Slovenia: “**Challenges of system performances in energy transition framework - Re-powering markets and Low emission technologies**”, , in May/June
- ☐ 2021 Symposium in Japan: “**Distribution system-related technologies**”, in October/November

CIGRE Information system

Online
membership
management
tool

Operational

Abstracts
& papers
management
online tool

Operational

CIGRE events
registration tool

Operational

SC membership
renewal
management
online tool

Operational

Collaborative
tools for
SC & WG

Operational

Electronic
library
improvement
(e-cigre)

Operational

Central Office projects

- ☐ WG management online tool
- ☐ Webinar management
- ☐ Web site refurbishment
- ☐ Quality management

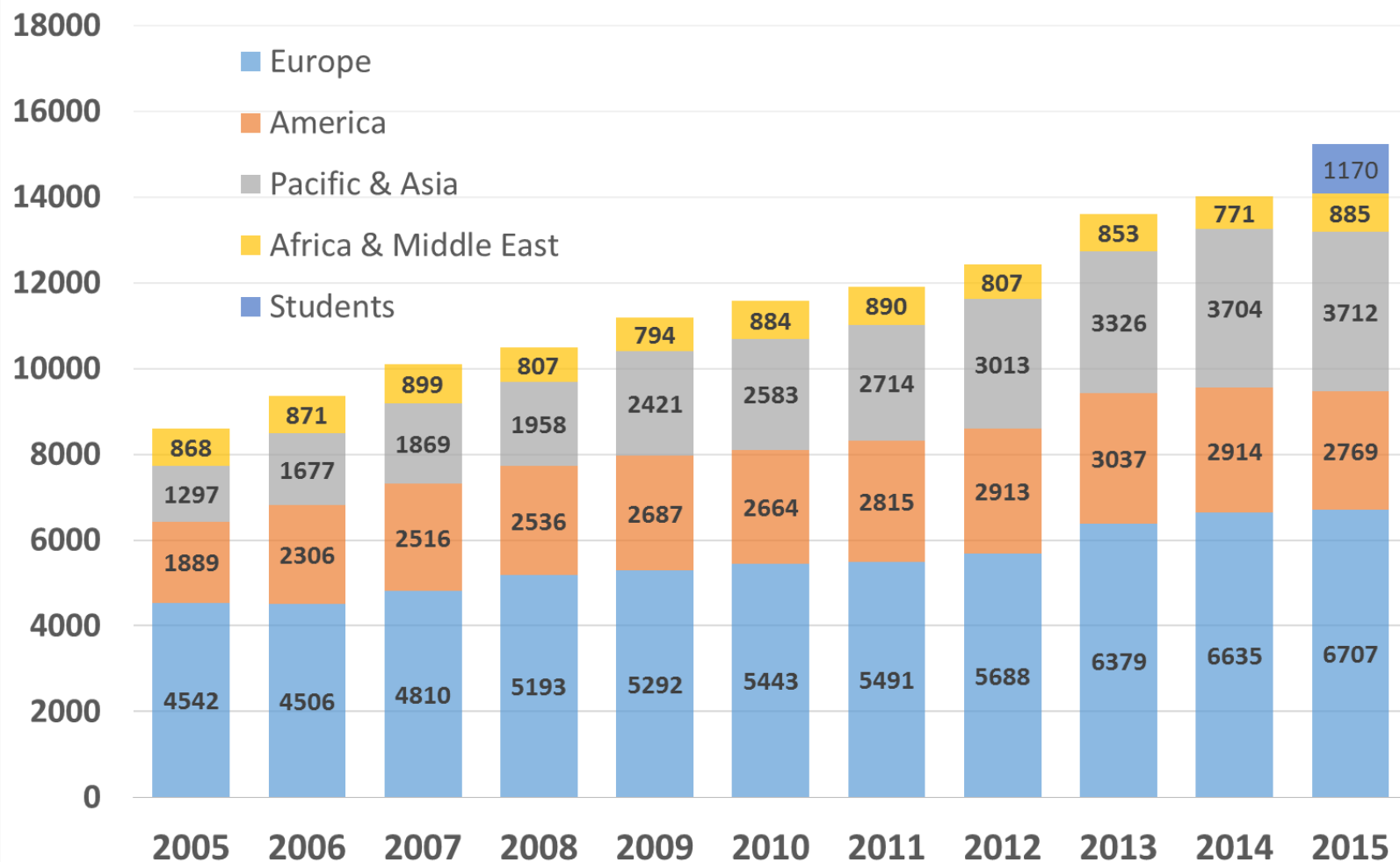


Thank you for your attention.

International Activities

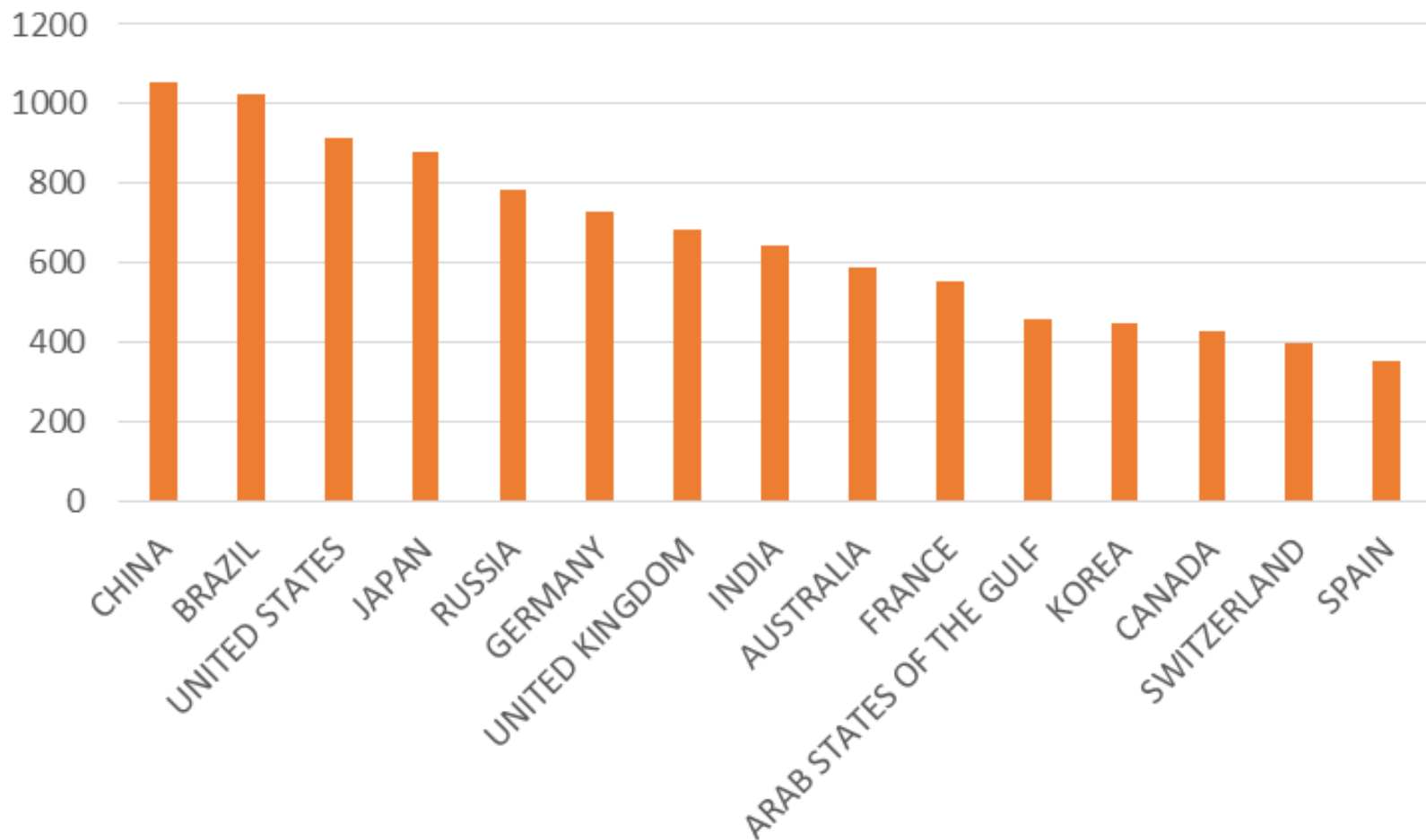
- New marketing and branding effort to support CIGRE Strategic Plan and National Committees
 - CIGRE – Enabling sustainable electricity for all
 - Mission – World's foremost collaborative technical reference organization for all aspects of electric power systems
 - Vision - Universally recognised as the leading global organisation for all aspects of electric power systems
- Strategic expansion into distribution
- Enhancing relationships with global organizations

CIGRE membership





2016 CIGRE Equivalent Membership Top 15 National Committees





Awards & Recognition Committee

- Keith Lindsey – Chair – Lindsey Mfg. Co.
- Dick Wakefield – Vice Chair – Consultant
- Clark Gellings – EPRI – Consultant
- Mike Heyeck - Consultant
- Elizabeth LaRose – GE Energy Connections
- John McDonald – GE Grid Solutions
- Rana Mukerji – New York ISO
- Chris Root – VELCO
- B. Don Russell – Texas A&M University
- Virginia Sulzberger - Consultant



Awards & Recognition – 2017

- **USNC Awards (2017)**
 - Attwood Associate
 - Philip Sporn
 - Outstanding Collective Member

USNC Attwood Associate Award – Citation –

“To honor the contributions and memory of Frederic Attwood of the USA, who, with J. Tribot Laspiere of France, foresaw the need for an international organization in the field of high-voltage power engineering and who became the first chairman of the U.S. National Committee upon the founding of CIGRÉ in the year 1921.”



USNC Attwood Associate Awards – 2017

- **Mark Adamiak**



USNC Attwood Associate Awards – 2017

- **Mark Adamiak**
- **Roger C. Dugan**



USNC Attwood Associate Awards – 2017

- **Mark Adamiak**
- **Roger C. Dugan**
- **Mark McGranaghan**



USNC Attwood Associate Awards – 2017

- **Mark Adamiak**
- **Roger C. Dugan**
- **Mark McGranaghan**
- **William G. Moore**



USNC Attwood Associate Awards – 2017

- **Mark Adamiak**
- **Roger C. Dugan**
- **Mark McGranaghan**
- **William G. Moore**
- **Andrew Phillips**

USNC Philip Sporn Award — 2017

– Citation –

“For cumulative career contributions to the advancement of the concept of system integration in the theory, design, and/or operation of large high-voltage electric systems in the United States.”



USNC Philip Sporn Award — 2017

- **P. Jeffrey Palermo**



USNC Outstanding Collective Member Award — 2017



USNC Outstanding Collective Member Award — 2017

Tennessee Valley Authority



“For outstanding leadership and continuing managerial, technical, and financial support of the activities of the U.S. National Committee and CIGRE over an extended period of time.”



Tennessee Valley Authority

- TVA has been a USNC collective member of CIGRÉ since 1969. TVA is the USNC's longest serving collective member and a Patron collective member since the early 1990's to the present.
- TVA has been active on the USNC Executive Committee. From 2002 to 2007 Terry Boston served from TVA. More recently Clayton Clem has served on the Executive Committee from TVA.
- TVA has always been involved in CIGRE technical activities. Jack Chadwick from TVA was US representative to SC 34 (Power System Protection) from 1981 to 1993. More recently TVA has provided US representatives on SC C4, Ian Grant from 2006 to 2013 and Theo Laughner from 2014 to present.



USNC Outstanding Collective Member Award — 2017

GE Energy Connections



“For outstanding leadership and continuing managerial, technical, and financial support of the activities of the U.S. National Committee and CIGRE over an extended period of time.”



GE Energy Connections

- GE has been a USNC collective member of CIGRÉ since 1993 and a Patron collective member since the early 1990's to the present.
- GE has been active on the USNC Executive Committee. From 1991-1992, Eugene J. Kovarik served as a VP of the USNC. In 1993 J. M. Lavin served. From 1994-1999, Thomas F. Garrity was a VP of the Executive Committee. From 2000-2008, Hamid Elahi served as a VP on the Executive Committee. Beth LaRose took over for Hamid in 2009. In 2009 John McDonald joined the Executive Committee as VP Technical Activities.



GE Energy Connections

- GE has always been involved over the years in CIGRE Technical Activities. More recently, Sam Salem was SC A1 Representative from 2006 through 2013; Hamid Elahi was SC B4 Representative from 2010 through 2014; Mark Adamiak was SC B5 Representative from 2008 through 2014; Sebastian Achilles is the SC B4 Representative from 2015 through the present; Rich Hunt is the SC B5 Representative from 2015 through the present.



Nominations & Appointments Committee

- Chris Root – Chair – VELCO
- Chris Kelly – National Grid
- Damir Novosel – Quanta Technology
- Mark McGranaghan – EPRI
- John McDonald – GE Grid Solutions



USNC Vice Presidents (Chairs of USNC Committees) Nominations for Term Ending Through 2019

- Keith Lindsey (Lindsey) Awards & Recognition
- Mike Beehler (Burns & McDonnell) Marketing & Membership
- Chris Root (VELCO) Nominations & Appointments
- Amanda Olson (Burns & McDonnell) Next Generation Network

USNC Officers

Term Ending (TE) Through 2018:

- David Roop (Dominion Energy)- President
- Mike Heyeck (USNC) - Past President
- Don Russell (TAMU) – Secretary; VP, Administration-Secretariat
- Chris Kelly (National Grid) - VP, Treasurer
- John McDonald (GE Grid Solutions) – VP, Technical Activities



Executive Committee as Members at Large Term Ending 2018

William Ball (Southern Company)	Dr. R. Ramakumar (Oklahoma State University)
Thomas Damon (Leidos)	Stewart Ramsey (Varney & Associates)
Jaime De La Ree (Virginia Tech)	Gregory Reed (University of Pittsburgh)
Valentine Emesih (Centerpoint Energy)	Paul Roskilly (Siemens Energy Management)
Clark W. Gellings (USNC)	Donald Russell (American Transmission Company)
Patrick Hogan (PG&E)	Erik Takayesu (Southern California Edison)
Elizabeth LaRose (GE Energy Connections)	Sunil Talati (DNV-GL)
Yilu Lie (University of TN & Oak Ridge Nat Lab)	Dick Williams (Mitsubishi Electric Power Products)
Aaron Lewis (Black & Veatch Corp)	Longya Xu (Ohio State University)
Kevin Rapp (Cargill)	



Executive Committee as Members at Large Term Ending 2017

Sandy Aivaliotis (Valley Group)	Tomas Leander (ABB, Inc.)
Khalid Al-Olimat (Ohio Northern University)	Rob Manning (EPRI)
Shay Bahramirad (Commonwealth Edison)	Mark McGranaghan (EPRI)
Samuel Barnes (Commonwealth Associates, Inc)	Rana Mukerji (NY-ISO)
Sanjay Bose (ConEdison)	Damir Novosel (Quanta)
Robert W. Bradish (American Electric Power)	Andy Ott (PJM Interconnection, LLC)
Carl Bridenbaugh (First Energy Corporation)	Tim Qualheim (S&C)
Mark Caskey (Sharyland Utilities, LP)	Richard Shaheen (BPA)
Clayton Clem (Tennessee Valley Authority)	Eric Stein (Exelon)
Terence Donnelly (Exelon)	Demetrios A.Tziouvaras (Schweitzer Engineering)
Wayne Galli (Clean Line Energy Partners, LLC)	Edvina Uzunovic (WPI)
Tom Galloway (NATF)	Gordon van Welie (ISO-NE)
Randy Grass (Power Engineers)	Peng Zhang (UConn)
Scott Homes (Smart Wires)	



USNC – 2016 Finances

- **Revenues:**

– Individual Memberships	\$ 76,125.00
– Collective Memberships	\$120,000.00
– Corporate Sponsorships	\$211,250.00
– Conference Income	\$350,169.81

Paris Reception, Grid of the Future & Colloquium

Annual Mtg., Paris, Grid of the Future & Colloquium

Revenue Total: \$757,544.81

- **Expenses:**

– Dues to Paris Office	\$ 81,907.91
– Administration/Operations	\$ 88,014.23
– Conferences	\$ 519,196.34
– Travel	\$ 46,646.05
– Marketing	\$ 28,670.00

Expense Total: \$764,434.53

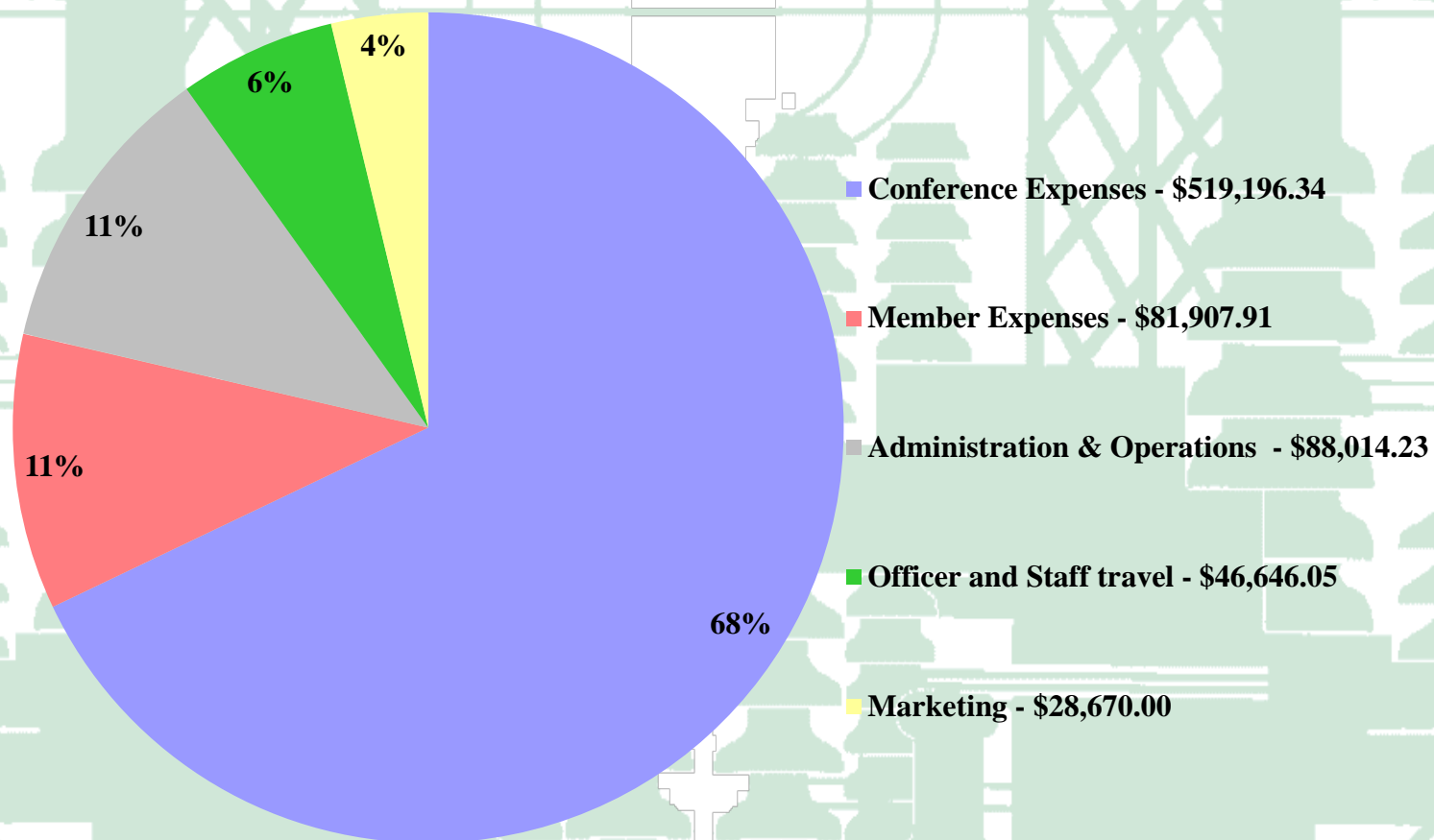


USNC – Financial Summary – 2016

(audited and closed)

	<u>Budget</u>	<u>Actual</u>
Revenues	\$ 877,025.00	\$ 757,544.81
Expenses	\$ 807,100.00	\$ 764,434.53
Net Income	\$ 69,925.00	\$ -6,889.72
Investments:		
Certificates of Deposit:		\$ 263,007.11

2016 Expense Breakdown



USNC Membership

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017*</u>
Individual	430	528	525	608	548
"Collective"	33	39	45	57	55
Principal	(20)	(24)	(27)	(29)	(26)
Sustaining	(5)	(7)	(5)	(5)	(8)
Patron	(8)	(8)	(9)	(9)	(8)
Educational			(4)	(14)	(13)

* 2017 Data as of June 13, 2017



Collective – Members 2017 (to date)

Patron Members (8)

ABB, Inc.

Commonwealth Edison

Dominion Energy

GE Energy Connections

AEP Service Corporation

ConEdison

EPRI

Tennessee Valley Authority

Sustaining Members (8)

CommonWealth Associates, Inc.

Lindsey Manufacturing Co.

New York ISO

PJM Interconnections

ISO New England, Inc.

National Grid USA

North American Substation Services

S&C Electric Co.



cigre

Collective – Members 2017 (to date)

Principal Members (26)

American Transmission Co.

Burns & McDonnell

CenterPoint Energy

CTC Global

Leidos

MPR Associates, Inc.

Pacific Gas & Electric Co.

POWER Engineers, Inc.

Schweitzer Engineering Laboratories

Sharyland Utilities, L.P.

Smart Wires Inc.

Southern Company

Vanry + Associates

Bonneville Power Adm.

Cargill

Clean Line Energy Partners

First Energy Corp.

Mitsubishi Electric Power Products

North American Transmission Forum

PECO Energy

Quanta Services

Sediver USA

Siemens Energy, Inc.

Southern California Edison

ULC Robotics

VELCO



cigre Collective – Members 2017 (to date)

Educational Members (13)

Kansas State University

Ohio Northern University

Oklahoma State University

Texas A&M University

The Ohio State University

University of Connecticut

University of Missouri

University of Pittsburgh

University of Puerto Rico - Mayaguez

University of Tennessee

USACE Library

Virginia Polytechnic Institute and State University

Worcester Polytechnic Institute



Grid of the Future Symposium

Hilton Cleveland Downtown | Cleveland, Ohio

October 22-25, 2017

Paper Submissions & Registration Info:
cigre-usnc.org/grid-of-the-future



The CIGRE U.S. National Committee and EPRI host plenaries, panels, technical papers, and tutorials in a forum for state-of-the-art innovations and practice in generation, transmission, distribution, markets, and advanced technologies.

FirstEnergy



EPRI | ELECTRIC POWER
RESEARCH INSTITUTE

CIGRE GOTF 728x90 lead banners on the T&D World website through May 2017

2017 Grid of the Future Symposium

October 22-24 | Cleveland, Ohio

cigre-usnc.tamu.edu/grid-of-the-future



- 127,966 Impressions
- 557 Clicks
- 0.44% Click Through Rate



Audience Extension banners for March and June 2017

2017 Grid of the Future
Symposium

October 22-24 | Cleveland, Ohio

now accepting
paper submissions!

2017
Grid
of the
Future
Symposium

October 22-24
Cleveland, Ohio

cigre-usnctamu.edu/grid-of-the-future

- 13,763 Impressions
- 50 Clicks
- 0.36% Click Through Rate



Next Generation Network (NGN)

CIGRE

U.S.
NATIONAL
COMMITTEE

NEXT
GENERATION
NETWORK

- Early career professionals and students
- Facilitate successful transition and retention in power system industry
- Provide technical and personal development



“CIGRE, and the NGN, provides an opportunity for young engineers to engage in the electric power industry in exciting and innovative ways. As a student, the access to high quality publications and interaction with industry experts across a myriad of focus areas is simply invaluable.”

-Ryan Quint, NERC

Next Generation Network (NGN)

Activities

CIGRE Working Groups

- Collaborate with world class experts on groundbreaking initiatives

Paper Competition

- Recognize early career accomplishments
- Prizes for winners including free Paris registration and travel stipend

GOTF Symposium

- Sponsored events for technical development and networking

Webinars

- Learn about varying power system and leadership topics



Next Generation Network (NGN)

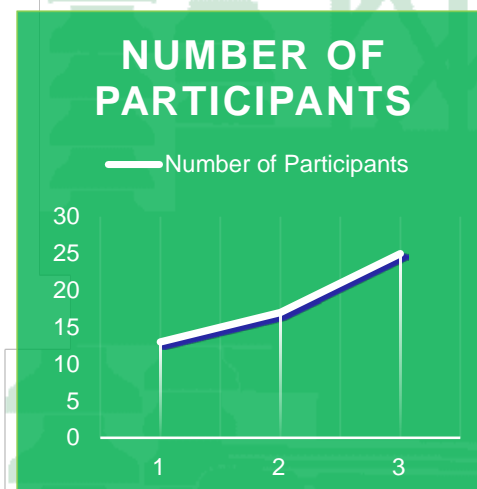
Mentor Group Feedback

"I feel that my technical background is good enough to understand, criticize, and raise questions. However, when it comes to experience, I am a graduate student with about 5 years of industry experience, while other group members have at least 15+ years of experience. I prefer to think that everybody starts one day, and this is my turn. I am glad for having this opportunity to be exposed to a worldwide group of experts in the field."

-Marcos Netto, Working Group Corresponding Member



Next Generation Network (NGN) Paper Competition





Next Generation Network (NGN) Plans for the Future

Looking Back

(2016/17 Goals):

- Continue paper competition
- Build presence on social media
- Update website

Looking Forward

(2017/18 Goals):

- Continue paper competition
- Focus heavier on social media presence
- Become involved with local Universities



Next Generation Network (NGN)

2017 Executive Committee

Position	Name	Company
Chair	Mandy Olson	Burns & McDonnell
Communications Secretary, newsletter, website	Kyle Thomas	Dominion Energy
Events Grid of the Future, international colloquium	Chris Mertz Kojo Sefah	Dominion Energy MISO
International Collaboration	Lauren Warkenthien	Leidos
Marketing Marketing plan, materials	Yazan Alsmadi	AEP
Membership University outreach, tracking	Cynthia Ocasio-Hassett	Worley Parsons
Mentoring Working group correspondence	Diana Lee	VELCO
Professional Development Paper competition, Webinars	Saeed Kamalinia	S&C Electric
Social Media	Josh Snodgrass	POWER Engineers
Webmaster	Chris Mertz Jessica Lau	Dominion Energy Orange & Rockland
Members-At-Large	Ryan Quint	NERC

Technical Activities Committee

- U.S. Representatives to CIGRÉ Study Committees & Appointment Dates
- U.S. Synopses Submittals for the 2018 Paris Session (NCA, IA, AA)
- USNC Synopses Selection Process
- GOTF Paper Submission and Evaluation
- Working Groups/Task Forces Member Selection Process
- CIGRE WG and Convener Origins



U.S. Representatives to CIGRÉ Study Committees & Appointment Dates

- A1-Bill Moore (EPRI) - 2014
- A2-Mike Lamb (Dominion Energy Virginia) – 2016
- A3-Nenad Uzelac (G&W Electric) – 2014
- B1-Mohammad Pasha (United Illuminating) – 2014
- B2-Jennifer Havel (BPA) – 2014
- B3-John Randolph (PG&E) – 2012
- B4-Sebastian Achilles (GE Energy Connections) – 2014
- B5-Rich Hunt (GE Grid Solutions) – 2014



U.S. Representatives to CIGRÉ Study Committees & Appointment Dates

- C1-Jeff Palermo (PJP Consulting) – 2014
- C2-Todd Ramey (MISO) – 2016
- C3-Vacant
- C4-Theo Laughner (TVA) - 2014
- C5-Adam Keech (PJM Interconnection) - 2014
- C6-Jason Taylor (EPRI) – 2014
- D1-Andrew Phillips (EPRI) – 2012
- D2-Galen Rasche (EPRI) – 2012



Synopses Selected – 2018 Session

National Committee Allotment (NCA)

TYPE OF ALLOTMENT (NCA, AA, IA)	STUDY COMMITTEE	PREF. SUBJECT (PS1, PS2, PS3)	TITLE OF THE SYNOPSIS	AUTHORS
NCA	A1	PS1	Hybridizing Gas Turbine with Battery Energy Storage: Performance and Economics	N.W. Miller, J. Heinzmann, J. Frasier
NCA	A2	PS1	Design of Insulated Cables to Reduce Gassing Issues in Power Transformers	D. Vir, T. Golner
NCA	B2 & C3	JPS B2 & C3	Mitigating Temperature Risk with Engineered Surface Coatings	G.C. Baker
NCA	B5	PS1	IEC 61850 R-GOOSE Applications to Load Shedding Under System Emergency Conditions	A. Apostolov
NCA	C2	PS1	The Role of Fast Frequency Response in Low Inertia Power Systems	D. Stenclik, M. Richwine, N. Miller
NCA	C2	PS2	Cloud-based Data Exchange infrastructure for Wide Area Monitoring of Bulk Electric Power Grids	D. Anderson, M. Meng, A. Bose, C. Hauser, T. Gkountouvas, K. Birman, E. Litvinov, X. Luo, F. Zhang
NCA	C4	PS1	On Steady-State Voltage Standards with High-Penetration of Distributed Energy Resources	J. Peppanen, J. Taylor
NCA	C4	PS2	Optimal Placement of Line Surge Arrestors Based on Predictive Risk Framework Using Spatio-Temporally Correlated Big Data	M. Kezunovic, T. Dokic, R. Said
NCA	D1	PS3	The Asset Health Center, Implementation of Online Monitoring and the Grid of the Future	R. Cornell, J. Llavona, K. Zellers, A. Sutliff, P. Chung
NCA	D2	PS3	A Hybrid Communications Network Approach for Advanced Applications on the Modern Grid	J.-P.H. Knauss

Synopses Selected – 2018 Session

International Allotment (IA)

TYPE OF ALLOTMENT (NCA, AA, IA)	STUDY COMMITTEE	PREF. SUBJECT (PS1, PS2, PS3)	TITLE OF THE SYNOPSIS	AUTHORS
IA	A3	PS3	Performance Evaluation of CO ₂ /Fluoronitrile Mixture at 63kA Short Circuit Current Level in Metal Enclosed (GIS and Dead Tank) High-voltage Circuit Breakers	V. Hermosillo, C. Gregoire, D. Vancell, J. Ozil, G. Gaudart
IA	A3	PS3	Vacuum Generator Circuit Breaker as a Reliable SF ₆ Alternative with Reduced Life Cycle Costs for Power Plants up to 400 MW	P. Leufkens, R. Nayar, K.R. Venna
IA	B2	PS1	Reliability Based Transmission Capacity Forecasting	J. McCall, R. Bliss, D. Nadeau
IA	B2	PS2	Test Results to Confirmation of Minimum Vegetation Clearance Distance (MVCD) Standards	A.J. Phillips, R. Lordan, C.S. Engelbrecht
IA	B4	PS1	Linking DC Macrogrids to Underlying AC Systems	L.O. Barthold, D.A. Woodford, M. Salimi
IA	B4	PS1	Converting Regional EHV AC Transmission to HVDC	C. Lockwood, N. Koehler, B. Mehraban, R. Adapa, M. Salimi, F. Gomez, D. Woodford
IA	B4	PS3	Refurbishment Strategies for Conventional SVC Stations Utilizing Modern Control Cooling and Thyristor Valves and Selective Main Circuit Replacements	M.A. Reynolds, B.C. Furumasu, A. Laughlin, R. Thorton, R. Broberg, A. Samadi
IA	B5	PS1	Developing a Unified Protection System: Philosophy, Short Circuit Software and Wide Area Protection Coordination Study	D. Novosel, D.G. Hart, S. Alaeddini, M. Malki, M.A. Al-Tukhaifi, S.M. Bamasak, M.T. Al Saba, H. Bin-Mashni, P.F. McGuire, D.C. Coleman, S. Aquiles, Z. Schreiner
IA	C5	PS1	Efficient Customer Aggregation using a Receding Horizon Optimization	A.J. Lamadrid, T. Mount, W. Jeon, H. Lu
IA	D1	PS2	A Rigorous Ageing Program for Ester/Cellulose Liquid Immersed Transformer Insulation Systems	R.P. Marek, J. Tenney, I. Atanasova-Hoehlein, H.M. Wilhelm, L. Lewand



Synopses Selected – 2018 Session

Additional Allotment (AA)

TYPE OF ALLOTMENT (NCA, AA, IA)	STUDY COMMITTEE	PREF. SUBJECT (PS1, PS2, PS3)	TITLE OF THE SYNOPSIS	AUTHORS
AA	A1	PS3	Forensic Analysis of Gas Turbine-generator Shaft Failures due to Possible Subsynchronous Resonance	J.D. Galvez, M.D. Urbina, D.J. Mader, J.B. Wisniewski
AA	A2	PS2	Machine Learning Tools in Support of Transformer Diagnostics	L. Cheim
AA	A2	PS3	100 Year Transformer	R. Fenton
AA	B3	PS1	138kV / 34.5kV Substation Design	V. Westfallen, M.R. Ahmed, G. Bolotin, N. Burica, B. Desai, C. Johnson, J. Meier, A. Mirza, C. Pytel, S. Sidime, A. Vennergrund, F. Luedtke, M. Mondello, J. Stamatopoulos, P. Tyschenko
AA	B3	PS2	Developing and Using Justifiable Asset Health Indices for Tactical and Strategic Risk Management	S. Rhoads, J. White, T. McGrail
AA	B5	PS2	Functional Testing of Digital Substations Based on IEC 61850 Process Bus	A. Apostolov
AA	C1	PS1	Trends in Transmission Planning Uncertainty and the Impacts and Value of Leveraging Flexible Investment Strategies and Technologies	M. Longoria, T. Bloch-Rubin, J. Erwin, E. Fan, A. Martin, T. Nudell
AA	C1	PS3	Introducing an Automated Analysis Tool and Reproducible Workflow to Streamline Reliability Planning with Heterogeneous Investment Options	T. Nudell, E. Fan, A. Martin
AA	C6	PS1	Distribution System Operator Cost Assessment	E.A. Paaso, S. Bahramirad
AA	C6	PS2	Benefit Cost Analysis of Battery Energy Storage Systems to Defer Distribution Capacity Upgrades on Utility Distribution Systems	E.A. Paaso, S. Bahramirad



2018 Synopses Selection Process

1. 47 Abstracts Received and Forwarded to USNC Study Committee Reps for their Advisory Committee Review
2. Abstracts Reviewed and Scored with Following Criteria:
 - Relevance to SC Preferential Subjects
 - Technical Content
 - Clarity of Synopsis
 - Avoid Commercialism
3. Abstract Recommendations Combined and Overall Ranking Created with the Following Criteria:
 - Balance Between SCs and Preferential Subjects
 - Highest Recommendations of Reviewers
 - International, National and Additional Commitment Allotments Requirements
4. 30 Synopses Submitted to Paris; 28/30 (93%) Accepted for 2016, 87% for 2014 and 83% for 2012



CIGRE USNC 2017 Grid of the Future (GOTF) Paper Process

- Call For Papers
 - Theme: Technology for the 21st Century Electric Utility
 - Symposium Scope (General Topics)
- No Abstract Step – Full Papers Only – Submitted by July 28, 2017
- Use Paper Preparation Template



GOTF Paper Evaluation Process

- Submitted Papers Forwarded to USNC Study Committee Reps for their Advisory Committee Review
- Evaluation Criteria
 - Novel and Innovative Technical Content (Concept with Implementation Results)
 - Clarity of Paper
 - No Commercialism
 - Adherence to Required Formatting (Use Paper Preparation Template)

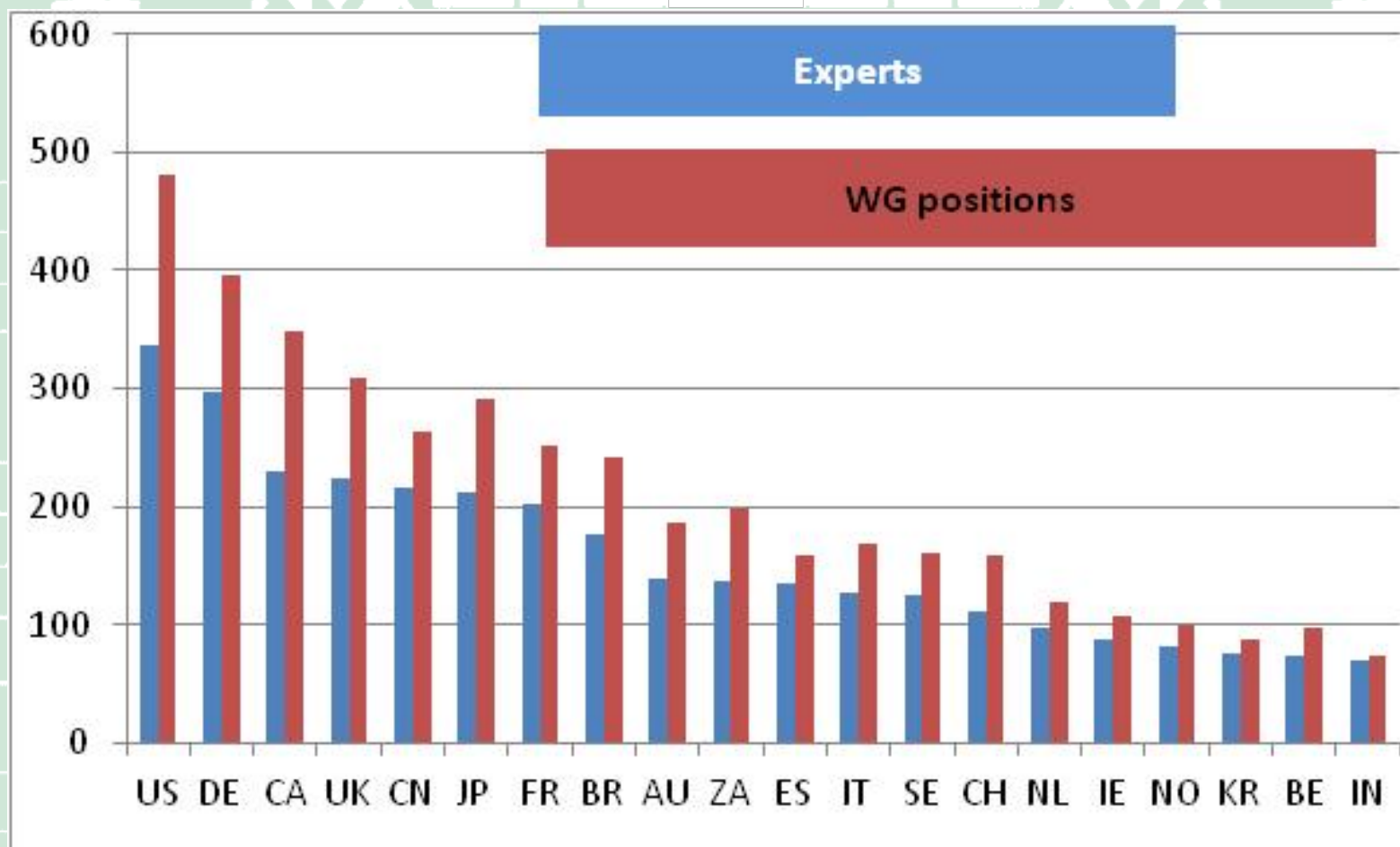


Working Groups/Task Forces Member Selection Process

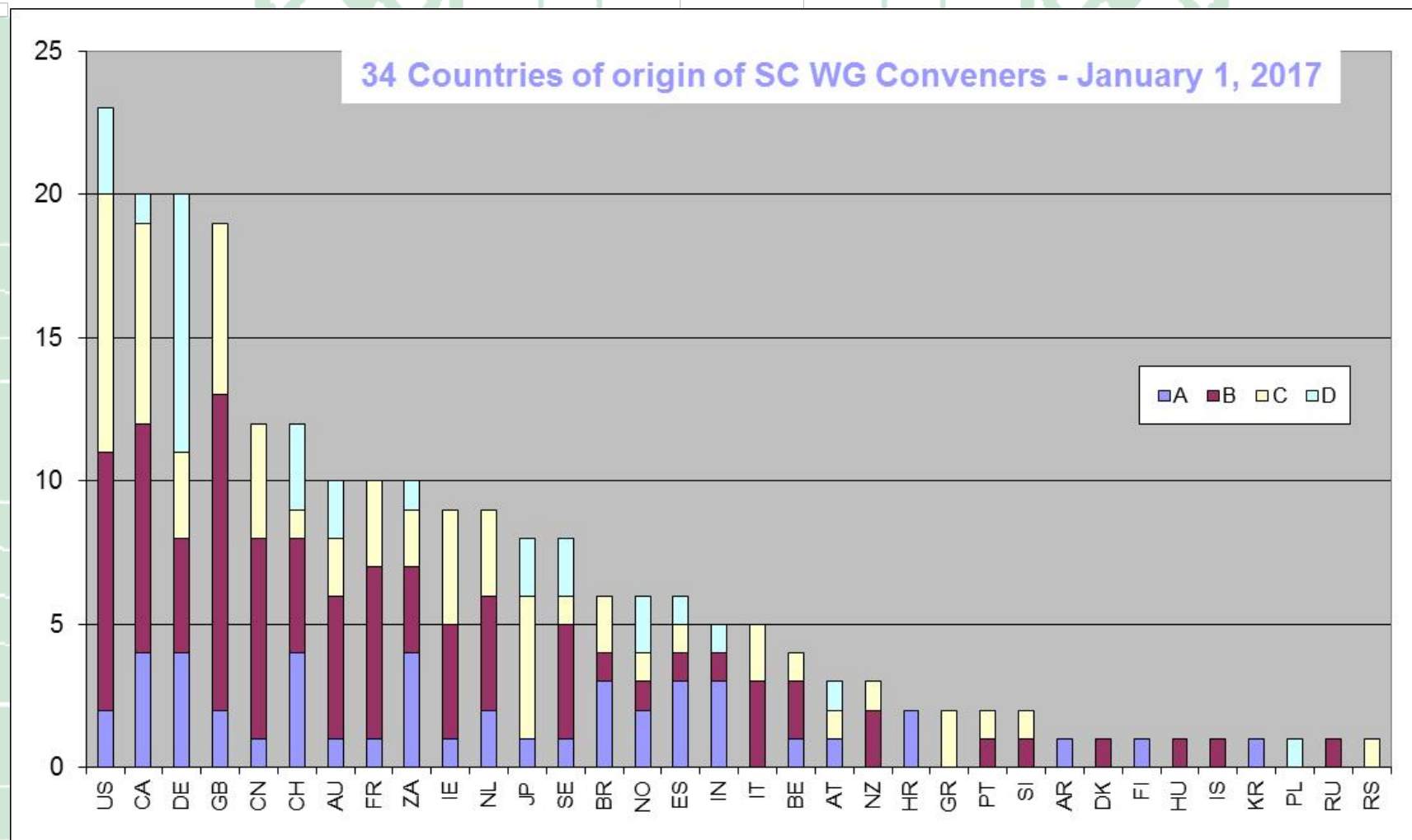
- Interested candidates must have Individual Member dues paid and send CV
- Obtain email address for new WG Convener and submit candidates' CVs directly to Convener
- Request Convener to confirm candidates' membership
- If no USNC candidates interested in a new WG, will ask new WG Convener for knowledge of US experts, and will contact them to see if they are interested in joining
- If more than two candidates are interested in same WG, set up a “shadow WG” within the USNC

Synthesis of the 2016 review

top 20 countries



Working Group Conveners' origins





Future CIGRÉ Meetings

2018 Events

Members Meeting – Portland, Oregon – August 7

CIGRE Paris Session – August 26 - 31

**GOTF – Washington, DC, October 28 – October 31
(Host – Dominion Energy)**

**REGISTER AT
cigre-usnc.org**

Big thank you!

Sharon Loe
Jessica Meadors

“The voice of CIGRE to our membership”

Discussion

USNC – CIGRE Membership & Guests