



U.S. National Committee of CIGRÉ

General Meeting

July 25, 2011

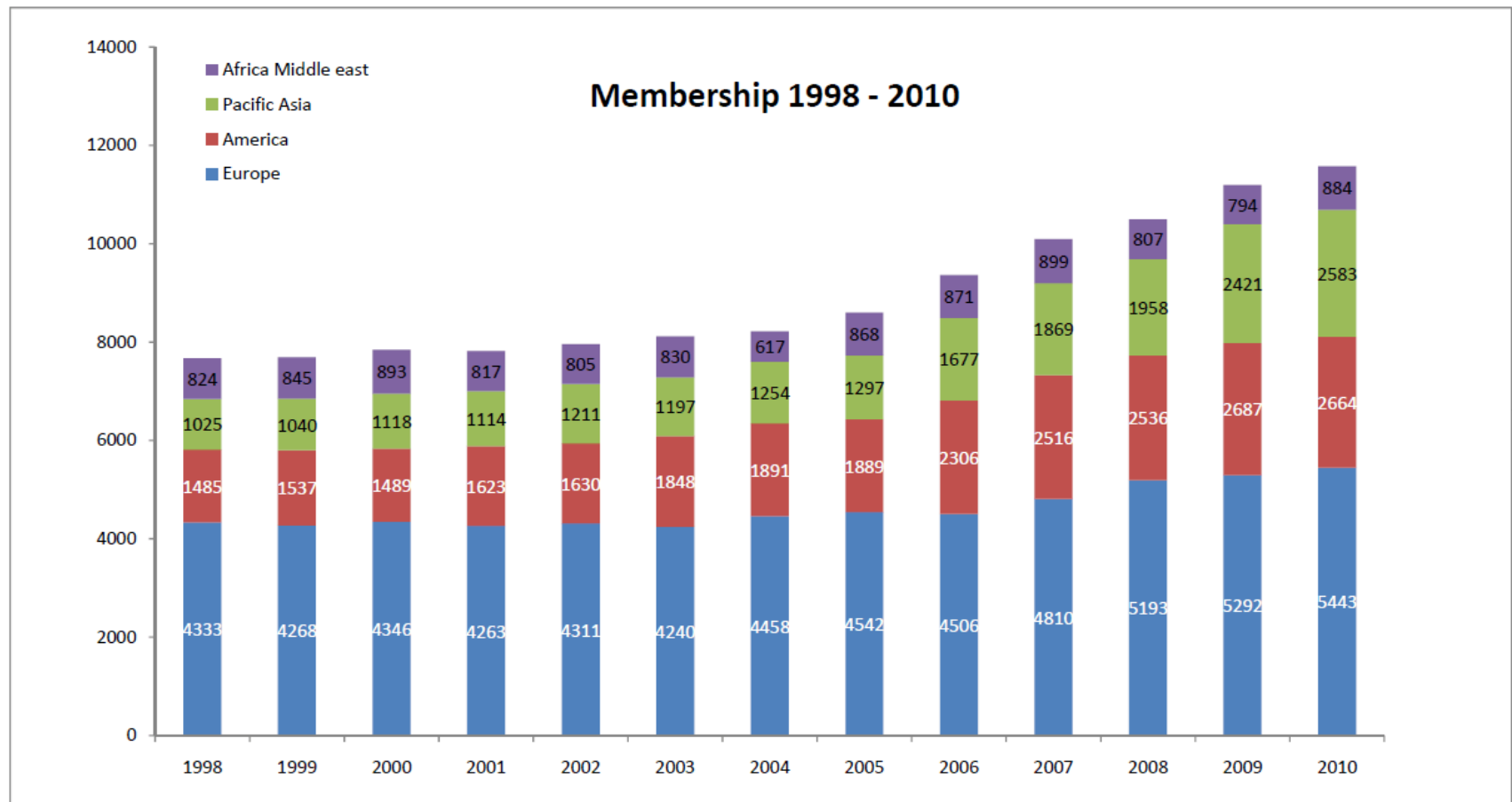
Detroit, MI



USNC General Meeting Agenda

- USNC President's Remarks M. Heyeck
- CIGRÉ International Activities F. Meslier
- President's Report/By-Law Revisions M. Heyeck
- Nominations and Appointments R. Wakefield
- Awards and Recognition J. Estey
- Administrative VP Report B. D. Russell
- Treasurer's Report T.W. Cease
- Technical Committee J. D. McDonald
- Secretary's Report/Future Meetings T. Witham
- Discussion USNC Members/Guests

CIGRÉ International Membership



Total = 11,574



Total Membership – 2010

Brazil	1006
United Kingdom	614
Japan	601
China	585
France	569
United States	484
Germany	462
Australia	418
Russia	406
Canada	355
Switzerland	350
India	345

CIGRÉ Organization (2010)

- **Officers**
 - President – André Merlin (FR)
 - Treasurer – Paulo Esmeraldo (BR)
 - Technical Comm. Chair – Klaus Fröhlich (CH)
 - Secretary General – François Meslier (FR)
- **Steering Committee, Administrative Council**
 - U.S. Rep – Clark Gellings

President's Report

- Highlights of CIGRE Activities



Proposed Revision to USNC By-Laws

- Eliminate Advisory Council which has informational role without power.
- Open Executive Committee (EC) to at-large membership to include representation of all collective members not already on EC.
- At-Large members of EC have full EC participation and voting privileges.
- EC to appoint initial at-large members for staggered terms based on nomination process by collective members.

Nominations & Appointments Committee

- Dick Wakefield – Chair – KEMA
- Gordon van Welie – ISO New England
- Rob Manning – TVA
- Arshad Mansoor – EPRI



Executive Committee Members Continuing Through 2012

- John Estey – VP (S&C Electric Company)
- Richard Wakefield – VP (KEMA)
- Ted Witham – Secretary
- B. Don Russell – VP (Texas A&M)
- David Pacyna – VP (Siemens)
- T.W. Cease – Treasurer (Consultant)
- John McDonald – VP (GE Energy)
- Gordon Van Welie – VP (ISO New England)
- Rob Manning – VP (TVA)
- Mike Heyeck – President (AEP)
- Clark W. Gellings – Past President (EPRI)



Slate of Officers Nominated for 2012 - 2013

Nominees for Re-Election:

- W. Terry Boston – VP (PJM Interconnection)
- Hamid Elahi – VP (GE Energy)
- John C. Houston – VP (CenterPoint Energy)
- Rana Mukerji – VP (New York ISO)

Nominees for New Election:

- Chris Root – VP (National Grid USA)
- Mike Beehler – VP (Burns & McDonnell)
- Mark McGranaghan – VP (EPRI)
- Aftab Khan – VP (ABB)
- Paul Renaud – VP (Independent)



Awards & Recognition Committee

- John W. Estey – Chair – S&C Electric Co.
- Hamid Elahi – GE Energy
- Clark Gellings – EPRI
- John C. Houston – CenterPoint Energy
- Keith Lindsey – Lindsey Manufacturing Co.
- John McDonald – GE Energy
- Rana Mukerji – New York ISO
- B. Don Russell – Texas A&M University
- Virginia Sulzberger - Consultant

Awards & Recognition – 2011

- **USNC Awards (2011)**
 - Attwood Associate
 - Philip Sporn

USNC Attwood Associate Award

“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 – 2011

- **Pouyan Pourbeik**
- **B. Don Russell**

USNC Philip Sporn Award — 2011

– 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 — 2011

Dr. Clive W. Reed

“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.”

CIGRÉ USNC Recognition Award

Clark W. Gellings

“Sincere appreciation and gratitude for your outstanding leadership as President, 2005 through 2010. Your ideas, energy and commitment have significantly contributed to CIGRÉ’s success.”

USNC Membership

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011*</u>
Individual	358	380	319	332	379
"Collective"	22	29	27	28	31
Collective	(12)	(18)	(14)	(14)	(18)
Sustaining	(5)	(5)	(7)	(6)	(5)
Patron	(5)	(6)	(6)	(7)	(8)
Educational	(1)	(1)	(1)	(1)	(0)

* 2011 Data as of June, 2011



USNC – Membership 2010

Collective Members (14)

Zenergy Power Inc.

AREVA T&D, Inc.

National Grid USA

KEMA Inc.

Bonneville Power Adm.

Mitsubishi Electric Power Products

Schweitzer Engineering Laboratories

Hunt Transmission Services, LLC

Exelon Transmission Company

Power Line Systems, Inc.

Siemens Energy, Inc.

Black & Veatch

S. D. Myers Inc.

Allegheny Power



USNC – Membership 2010

Sustaining Members (6)

S&C Electric Company

PJM Interconnection, LLC

New York ISO

CenterPoint Energy

ISO New England, Inc.

Lindsey Manufacturing Co.

Patron Members (7)

ABB, Inc.

AEP Service Corp.

Dominion

Electric Power Research Institute (EPRI)

GE Energy

Tennessee Valley Authority

Northeast Utilities

Educational Institution Member (1)

Purdue University



USNC – 2010 Finances

- **Revenues:**

– Individual Memberships	\$ 48,430.00
– Collective Memberships	\$ 64,750.00
– Paris Session Income	\$166,869.00
– Corporate Donations	\$ 76,000.00
– Meetings Income	\$ 2,100.00
– Interest income	\$ 506.33

- **Expenses:**

– Dues to Paris Office	\$ 49,126.26
– Paris Session Expenses	\$195,630.48
– Administration	\$ 43,151.83
– Awards	\$ 1,438.04
– Meetings	\$ 3,560.59

Net Income: \$ 65,748.13



USNC – Financial Summary – FY 2010

	<u>Budget</u>	<u>Actuals</u>
Revenues	\$ 295,905.00	\$ 358,655.33
Expenses	\$ 252,177.19	\$ 292,907.20
Net Income	\$ 43,727.81	\$ 65,748.13

End of Year Position:

Certificate of Deposit: \$ 135,215.29

Cash Balance: \$ 88,054.07

Technical Committee Activities

- Technical Committee Study Committees
- U.S. Representatives to CIGRÉ Study Committees & Appointment Dates
- U.S. Abstract Submittals for the 2012 Paris Session (NCA, IA, AA)
- USNC Abstract Selection Process
- Working Groups/Task Forces Member Selection Process

Technical Committee Study Committees

CIGRÉ's
Technical
Committee (TC)

Coordination

Study
Committees

Working Groups

Task Forces

- Members nominated by National Committees
- Manage studies in their field of interest
- Working Groups and Task Forces are operational arms

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

- A1-Sam Salem (GE Energy) – 2006
- A2-Shirish (Sam) Mehta (Waukesha) – 2004
- A3-Mietek Glinkowski (ABB Inc.) – 2008
- B1-David Lindsay (EPRI) – 2008
- B2-Dale A. Douglass (Power Delivery) – 2006
- B3-Hanna E. Abdallah (Power Engineers) – 2004
- B4-Hamid Elahi (GE Energy) – 2010
- B5-Mark Adamiak (GE Energy) – 2008

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

- C1-Richard Wakefield (KEMA) – 2007
- C2-Anjan Bose (Washington State Univ.) – 2006
- C3-John Oglevie (Power Engineers) – 2006
- C4-Ian S. Grant (TVA) – 2006
- C5-Andrew L. Ott (PJM Interconnection) – 2006
- C6-Roger Dugan (EPRI) – 2008
- D1-Ravi S. Gorur (Arizona State Univ.) – 2004
- D2-Thomas E. Kropp (Nexant) – 2006

Abstract Submittal – 2012 Session

National Committee Allotment (NCA)

Corresponding Author	SC	PS	Title
B. Desai	A3	PS2	Practical Circuit Breaker Condition Monitoring with Protective Relays
N. Singh	B1	PS2	Condition and Remaining Life of Taped Transmission Cables through Non-Invasive and Invasive Testing Based on In-service Cables and Cable Samples Removed from Service
M. Kezunovic	B5	PS2	Automated Data Retrieval, Analysis and Operational Response Using Substation Intelligent Electronic Devices
P. Myrda	B5	PS2	Development of Secure Standards Based Approach to Automated Retrieval of Power System Field Data Including Subsequent Analysis and Response
T. Zheng	C2	PS1	Robust Optimization and its Application to Power System Operation
E. Udren	C2	PS2	In-Field Synchrophasor System Calibration, Testing, and Application Validation Using High-Voltage Optical Sensors
F. Zhao	C2	PS2	A New Coordination Scheme for Efficient Dispatch of Interconnected Electricity Markets
J. Snyder	C3	PS2	Assessing the Rising Needs for On-going Submarine Cable Electromagnetic Field Studies
N. Miller	C4	PS1	Impact of Frequency Response Wind Plant Controls on Grid Performance
Z. Jiang	C6	PS1	Universal Distribution Automation Management

Abstract Submittal – 2012 Session

International Allotment (IA)

Corresponding Author	SC	PS	Title
R. Marek	A2	PS2	A Simple Strategy to Extend the Life of GSU Power Transformers
R. Girgis	A2	PS3	Effects of Geomagnetically Induced Currents on Power Transformers and Power Systems
L. Barthold	B2	PS1	Prospective AC to DC Conversion of Two Parallel 287kV Transmission Lines in the Western US
L. Barthold	B2	PS1	Asymmetrical Design of VSC-Based HVDC Lines
D. Douglass	B2	PS1	Radial and Longitudinal Temperature Gradients in Bare Stranded Conductors with High Current Densities
N. Kirby	B4	PS3	Tres Amigas: A Flexible Gateway for Renewable Energy Exchange Between the Three Asynchronous AC Networks in the USA
D. Miller	B5	PS1	Application Considerations for Protection and Control Functions Available in Multiple Intelligent Electronic Devices
M. Steurer	B5	PS1	An Interactive Real-Time Test Environment for Protection and Control System Applications
J. Zhu	C5	PS1	Economic Assessment of Energy Storage Systems for Renewable Integration
G. Johnson	D1	PS1	Performance of DC Transmission Line Insulator Strings

Abstract Submittal – 2012 Session

Additional Allotment (AA)

Corresponding Author	SC	PS	Title
S. Salon	A1	PS2	Trends in Monitoring and Diagnostics of Wind Generators
L. Kempner	B2	PS2	Reliability of Transmission Towers Under Extreme Wind and Ice Loading
L. Kojovic	B3	PS1	Non-Conventional Current Sensors for Modern Substation Designs
L. Kojovic	B5	PS1	Integration of Protection, Control and Metering Functions
M. Ahmed	C1	PS1	Treatment of Renewable Generation and Generation Retirement Uncertainties in Transmission Planning as Applied to the American Electric Power System
A. Del Rosso	C3	PS2	The Impact of Improved Transmission System Efficiency and Utilization on Reducing Electricity Industry Carbon Footprint
R. Mukerji	C5	PS1	Integration of Wind Resources in the New York Electricity Market
S. Venkataraman	C5	PS1	Integrating Variable Energy Resources into the California Electricity Market
A. Chuang	C5	PS3	Impact of Demand-side Technology Readiness on Market Designs
T. Gurela	D2	PS1	New Architecture for Operational Information Systems

USNC Abstract Selection Process

1. 44 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 abstract
3. Abstract recommendations combined and overall ranking created with the following criteria:
 - Balance between SCs and preferential subjects
 - Highest recommendations of reviewers
 - International and National Commitment Allotments Requirements



Working Groups/Task Forces Member Selection Process

- Interested candidates must have dues paid and send CV
- Obtain email address for new WG Convenor and submit candidates' CVs directly to Convenor
- Request Convenor to confirm candidates' membership
 - Can have two USNC members on each WG
- If no USNC candidates interested in a new WG, will ask new WG Convenor for knowledge of US experts, and will contact them to see if they are interested in joining

Evolution of the Number of SC Working Bodies

April
2009

+40

April
2010

+54

April
2011

188

2009-2010

190

2010-2011

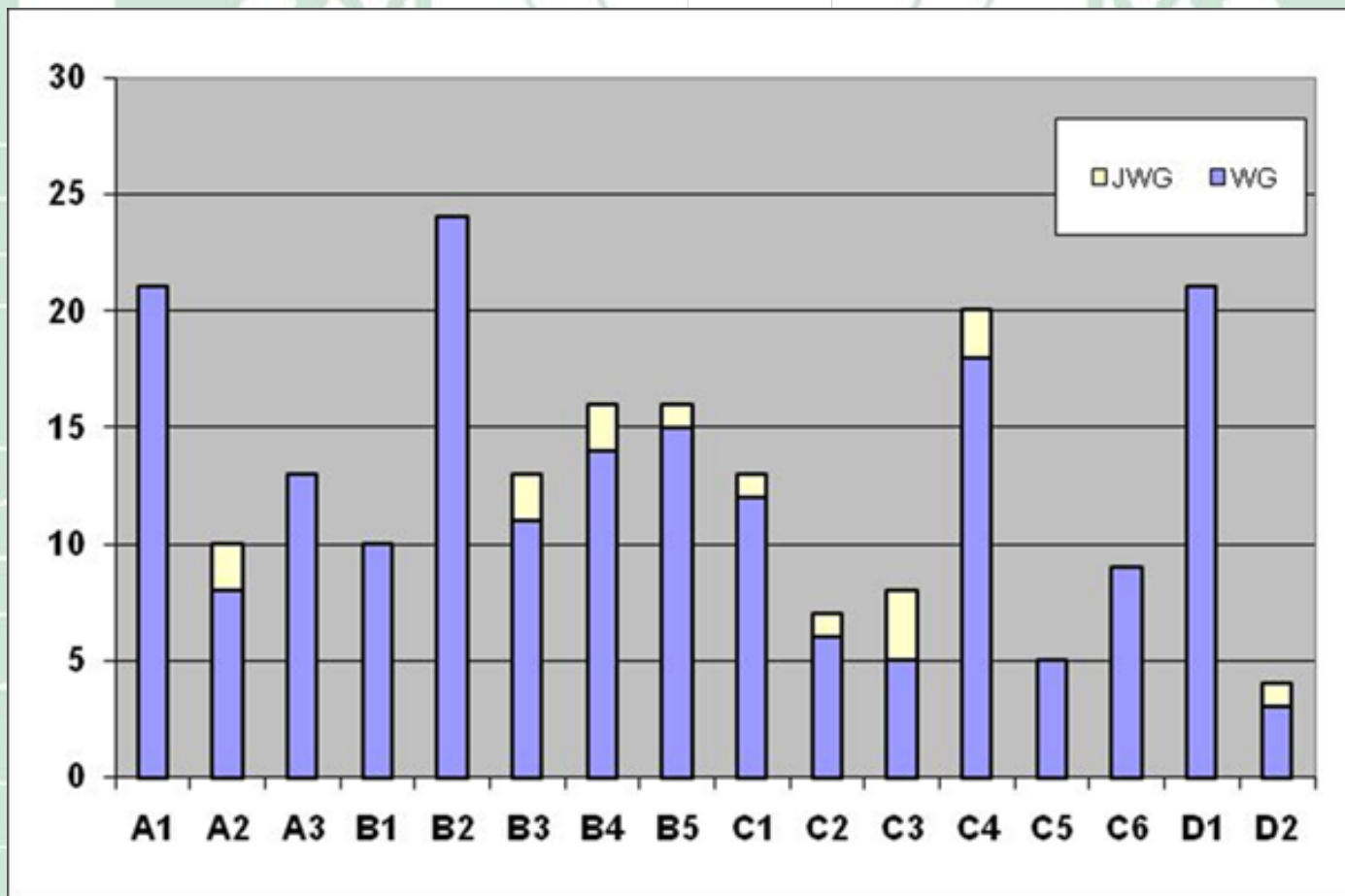
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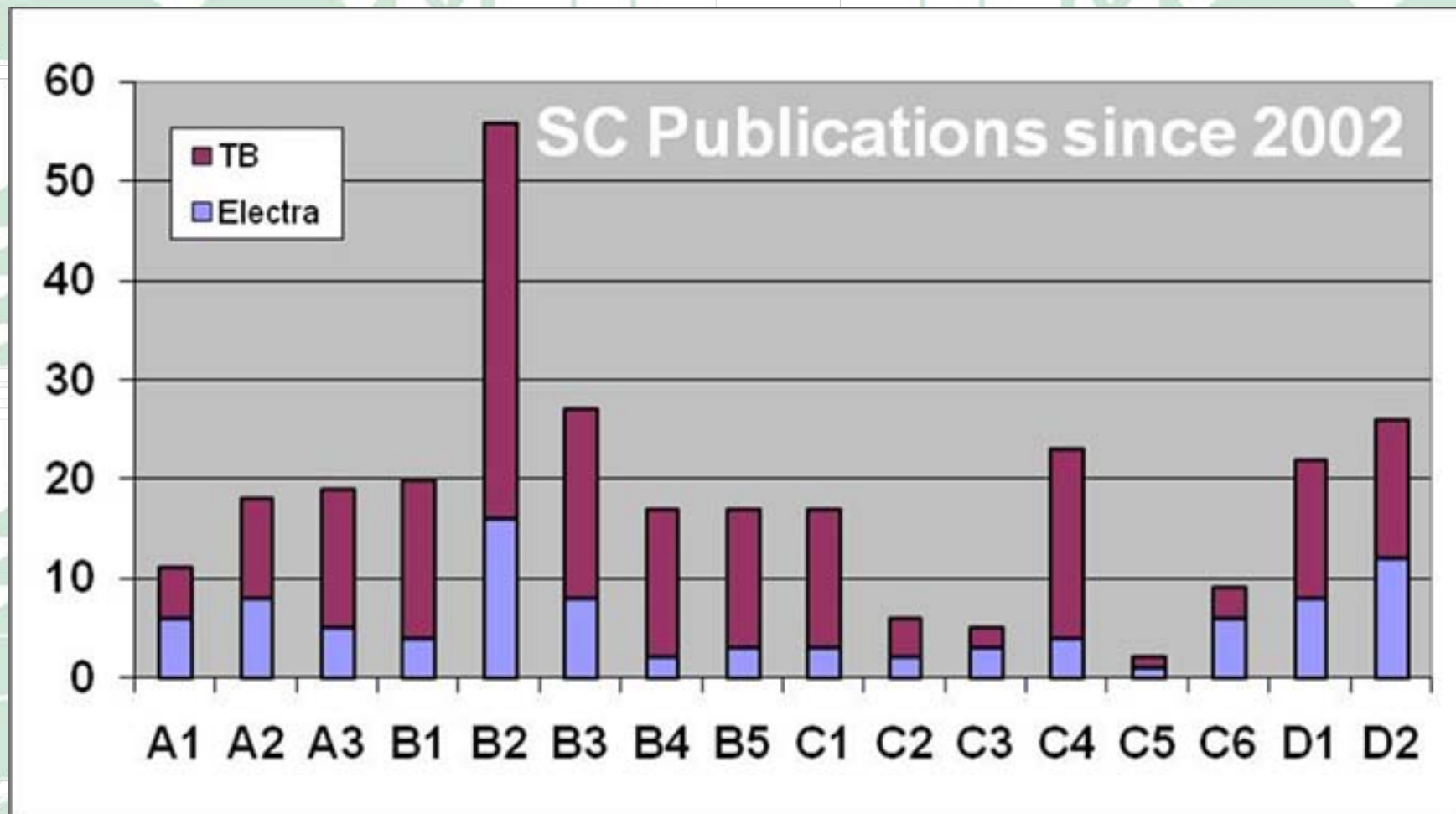
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Distribution of WGs on Study Committees

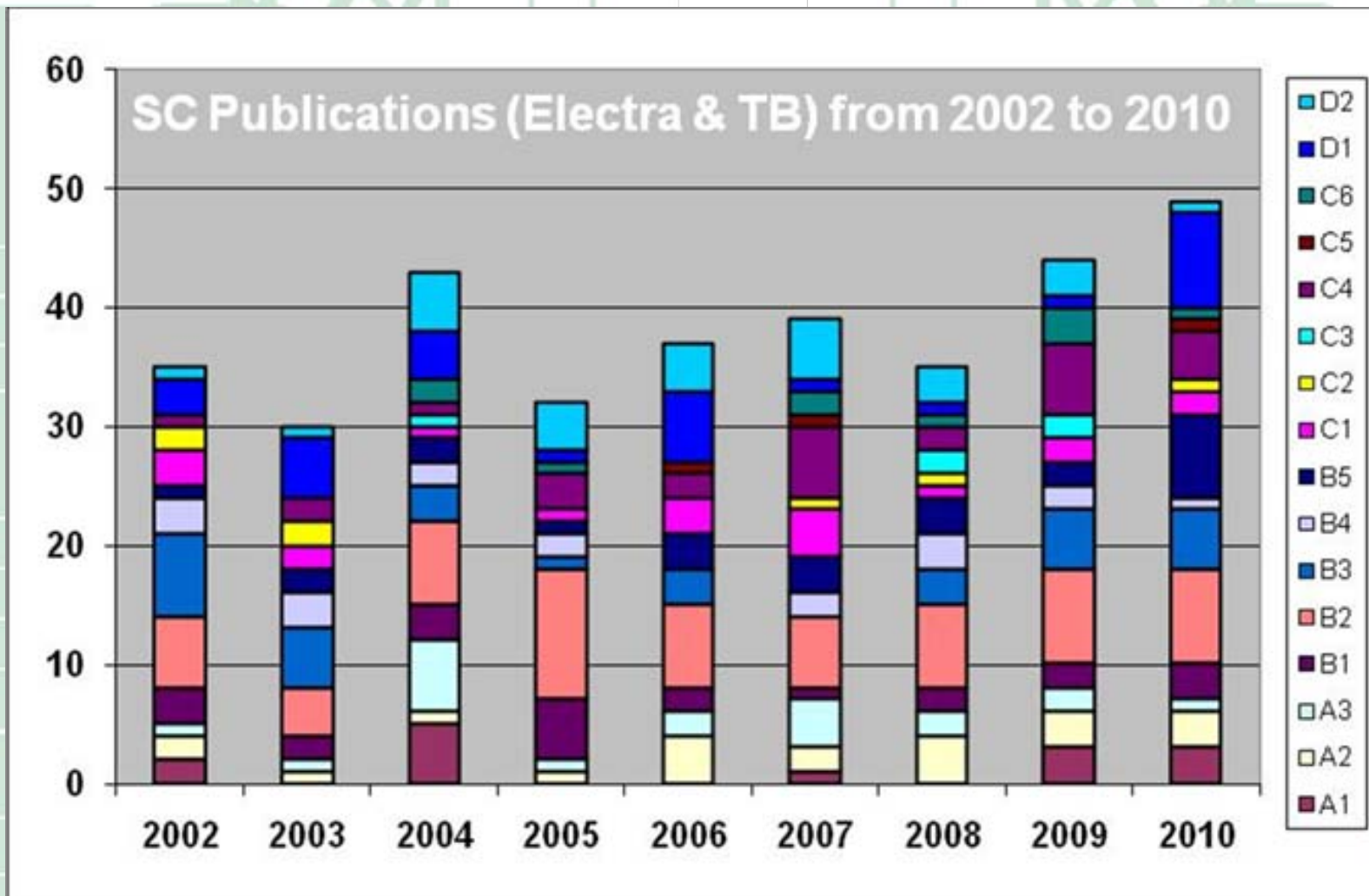
SCs	WG	TF	JWG	JTF	WB Total
All	195	0	15	0	210



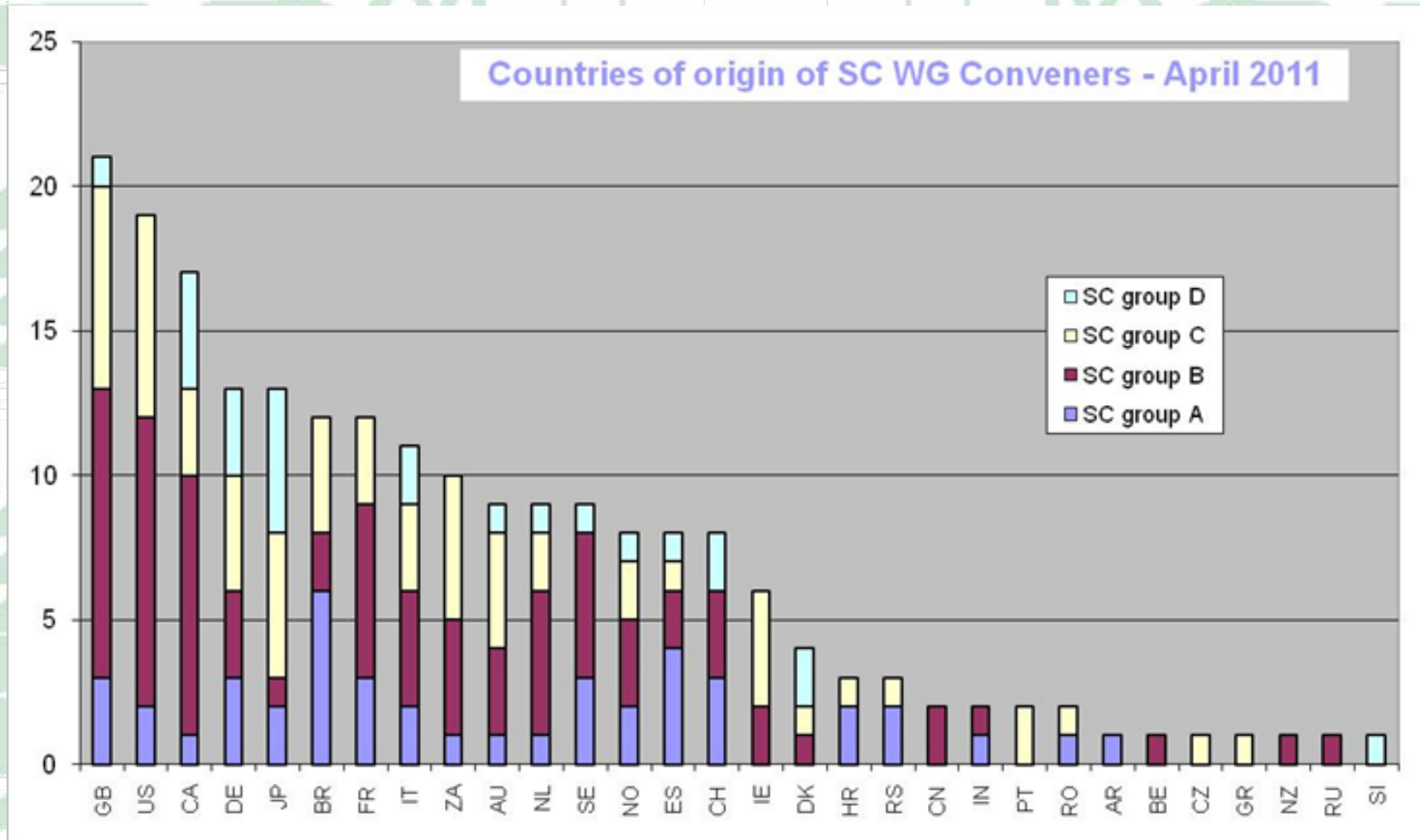
Working Group Publications from 2002 - 2010



Study Committee Publications from 2002 - 2010



Working Group Conveners' Origins



Future CIGRÉ Meetings

- **2011 Game Changers Symposium**, Nov 16-17, Atlanta
- **2012 HVDC Colloquium**, Mar 4-11, San Francisco
- **2012 CIGRÉ Session**, August 26 – 31, Paris
- **2012 Symposium – TBA**



Discussion

USNC – CIGRÉ Membership & Guests