

## NEMA's leadership in IEC (As of May 17, 2024)

### US TAG Secretary roles (US mirror work to IEC)

| NEMA Staff | Committee | Description                                                                                           | Secretariat              |
|------------|-----------|-------------------------------------------------------------------------------------------------------|--------------------------|
| Richmond   | TC 1      | Terminology                                                                                           | IEC Secretariat          |
| Leibowitz  | TC 2      | Rotating machinery                                                                                    | United Kingdom           |
| Doherty    | TC 3      | Documentation, graphical symbols and representations of technical information                         | Sweden                   |
| Richmond   | SC 3C     | Graphical symbols for use on equipment                                                                | Japan                    |
| Doherty    | TC 4      | Hydraulic turbines                                                                                    | Canada                   |
| Orr        | TC 13     | Electrical energy measurement and control                                                             | Hungary                  |
| Orr        | TC 14     | Power transformers                                                                                    | United Kingdom           |
| Masri      | TC 15     | Solid electrical insulating materials                                                                 | United States of America |
| Crampton   | TC 17     | High-voltage switchgear and controlgear                                                               | Sweden                   |
| Crampton   | SC 17A    | Switching devices                                                                                     | Sweden                   |
| Crampton   | SC 17C    | Assemblies                                                                                            | Germany                  |
| Masri      | TC 20     | Electric cables                                                                                       | Germany                  |
| Masri      | SC 21A    | Secondary cells and batteries containing alkaline or other non-acid electrolytes                      | France                   |
| Richmond   | TC 22     | Power electronic systems and equipment                                                                | Switzerland              |
| Richmond   | SC 22G    | Adjustable speed electric drive systems incorporating semiconductor power converters                  | United States of America |
| Granata    | SC 22H    | Uninterruptible power systems (UPS)                                                                   | France                   |
| Tong       | TC 23     | Electrical accessories                                                                                | Belgium                  |
| Tong       | SC 23A    | Cable management systems                                                                              | United Kingdom           |
| Moldoveanu | SC 23B    | Plugs, socket-outlets and switches                                                                    | Italy                    |
| Tong       | SC 23E    | Circuit-breakers and similar equipment for household use                                              | Italy                    |
| Moldoveanu | SC 23G    | Appliance couplers                                                                                    | Germany                  |
| Tong       | SC 23H    | Plugs, Socket-outlets and Couplers for industrial and similar applications, and for Electric Vehicles | France                   |
| Tong       | SC 23K    | Electrical Energy Efficiency products                                                                 | France                   |
| Masri      | TC 26     | Electric welding                                                                                      | Austria                  |
| Tong       | TC 32     | Fuses                                                                                                 | France                   |
| Tong       | SC 32A    | High-voltage fuses                                                                                    | France                   |
|            | SC 32B    | Low-voltage fuses                                                                                     | Germany                  |
| Crampton   | TC 33     | Power capacitors and their applications                                                               | Italy                    |
| Erbesfeld  | TC 34     | Lighting                                                                                              | United Kingdom           |
| Erbesfeld  | SC 34A    | Electric light sources                                                                                | United Kingdom           |
| Erbesfeld  | SC 34B    | Lamp caps and holders                                                                                 | Germany                  |
| Erbesfeld  | SC 34C    | Auxiliaries for lamps                                                                                 | United Kingdom           |
| Erbesfeld  | SC 34D    | Luminaires                                                                                            | United Kingdom           |

| <b>NEMA Staff</b> | <b>Committee</b> | <b>Description</b>                                                                            | <b>Secretariat</b>       |
|-------------------|------------------|-----------------------------------------------------------------------------------------------|--------------------------|
| Masri             | TC 35            | Primary cells and batteries                                                                   | Japan                    |
| Crampton          | TC 36            | Insulators                                                                                    | Sweden                   |
| Richmond          | TC 37            | Surge arresters                                                                               | United States of America |
| Richmond          | SC 37A           | Low-voltage surge protective devices                                                          | United States of America |
| Richmond          | SC 37B           | Specific components for surge arresters and surge protective devices                          | United States of America |
| Orr               | TC 42            | High-voltage and high-current test techniques                                                 | Canada                   |
| Richmond          | TC 44            | Safety of machinery - Electrotechnical aspects                                                | United Kingdom           |
| Leibowitz         | TC 55            | Winding wires                                                                                 | United States of America |
| Cucinotta         | SC 62B           | Medical imaging equipment, software, and systems                                              | Germany                  |
| Cucinotta         | SC 62C           | Equipment for radiotherapy, nuclear medicine and radiation dosimetry                          | Germany                  |
| Crampton          | TC 64            | Electrical installations and protection against electric shock                                | Germany                  |
| Richmond          | TC 65            | Industrial-process measurement, control and automation                                        | France                   |
| Richmond          | SC 65B           | Devices & process analysis                                                                    | United States of America |
| Richmond          | SC 65C           | Industrial networks                                                                           | France                   |
| Richmond          | SC 65E           | Devices and integration in enterprise systems                                                 | United States of America |
| Granata           | TC 70            | Degrees of protection provided by enclosures                                                  | Germany                  |
| Erbesfeld         | SC 77A           | EMC - Low frequency phenomena                                                                 | France                   |
| Cucinotta         | TC 87            | Ultrasonics                                                                                   | United Kingdom           |
| Marchionini       | TC 90            | Superconductivity                                                                             | Japan                    |
| Leibowitz         | TC 109           | Insulation co-ordination for low-voltage equipment                                            | Germany                  |
| Crampton          | TC 111           | Environmental standardization for electrical and electronic products and systems              | Italy                    |
| Masri             | TC 112           | Evaluation and qualification of electrical insulating materials and systems                   | Germany                  |
| Leibowitz         | TC 113           | Nanotechnology for electrotechnical products and systems                                      | Germany                  |
| Granata           | TC 120           | Electrical Energy Storage (EES) systems                                                       | Japan                    |
| Leibowitz         | TC 121           | Switchgear and controlgear and their assemblies for low voltage                               | France                   |
| Leibowitz         | SC 121A          | Low-voltage switchgear and controlgear                                                        | France                   |
| Tong              | SC 121B          | Low-voltage switchgear and controlgear assemblies                                             | Germany                  |
| Crampton          | PC 128           | Operation of electrical installations                                                         | FR                       |
| Doherty           | PC131            | Rotating electrical machines for the traction of road vehicles                                | Austria                  |
| Erbesfeld         | CISPR            | International special committee on radio interference                                         | United Kingdom           |
| Erbesfeld         | CIS/F            | Interference relating to household appliances tools, lighting equipment and similar apparatus | Australia                |
| Tong              | SyC LVDC         | Low Voltage Direct Current and Low Voltage Direct Current for Electricity Access              | IEC Secretariat          |
| Granata           | SyC Smart Energy | Smart Energy                                                                                  | IEC Secretariat          |
| Richmond          | SyC SM           | Smart Manufacturing                                                                           | United States of America |

**IEC Secretariat administration (international leadership)**

| NEMA Staff | Committee | Description                                         | Secretariat              | Secretary              | Assistant Secretary                             |
|------------|-----------|-----------------------------------------------------|--------------------------|------------------------|-------------------------------------------------|
| Masri      | TC 15     | Solid electrical insulating materials               | United States of America | Mr Solomon Chiang      |                                                 |
| Richmond   | SC 22G    | Adjustable speed electric power drive systems (PDS) | United States of America | Mr Christopher Johnson | Mr Kenneth E. Gettman                           |
| Richmond   | TC 37     | Surge arresters                                     | United States of America | Mr Michael G. Comber   | Mr David Richmond                               |
| Richmond   | SC 37A    | Low-voltage surge protective devices                | United States of America | Mr. David Richmond     |                                                 |
| Richmond   | SC 37B    | Components for low-voltage surge protection         | United States of America | Mr. David Richmond     |                                                 |
| Leibowitz  | TC 55     | Winding wires                                       | United States of America | Mr Mike Leibowitz      |                                                 |
| Richmond   | SC 65B    | Measurement and control devices                     | United States of America | Mr Wallie Zoller       | Mr Chao Feng                                    |
| Richmond   | SC 65E    | Devices and integration in enterprise systems       | United States of America | Mr. David Richmond     | Mr Donald (Bob) Lattimer<br>Mr Charley Robinson |
| Richmond   | SyC SM    | Smart Manufacturing                                 | United States of America | Mr Wallie Zoller       |                                                 |

**Other IEC positions held by NEMA staff:**

| NEMA Staff                  | Group         | Description                                                                                                                                                                       | Position         |
|-----------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Hae Choe                    | SMB           | Standardization Management Board (oversee TCs, Advisory Committees, Systems Work, Strategic Groups)                                                                               | US voting member |
| Hae Choe                    | SG 13         | Working with consortia                                                                                                                                                            | US member        |
| Hae Choe                    | SPCG          | IEC/ISO/ITU Standardization Programme Coordination Group                                                                                                                          | IEC member       |
| Khaled Masri                | SG14          | All Electric and Connected Society (AECS)                                                                                                                                         | US member        |
| Bryan Holland               | SEG 13        | Electrical equipment under extreme climate, environmental and disaster conditions                                                                                                 | US member        |
| Khaled Masri, Bryan Holland | SEG 16        | Standardization of Sustainability Technologies                                                                                                                                    | US member        |
| Hae Choe                    | ISO/IEC JTC 1 | US TAG for this group on Information Technology                                                                                                                                   | US TAG Member    |
| Khaled Masri                | ISO/IEC JTC 3 | US TAG for this group on Quantum Technologies                                                                                                                                     | Member           |
| Joan Sterling               | CAB           | Conformity Assessment Board (oversee IECCE, IECEx, IECQ, IECRE)                                                                                                                   | US voting member |
| Mike Leibowitz              | IECEE & IECEx | Conformity assessment for eletrotechnical equipment and components<br>Conformity assessment for certification to standards relating to equipment for use in explosive atmospheres | US TAG Secretary |
| Hae Choe                    | I-NRG         | Innovation & New Revenue Generation                                                                                                                                               | Member           |
| Megan Hayes                 | DAC           | Diversity Advisory Committee of IEC Board                                                                                                                                         | Chair            |