**INTERNATIONAL ELECTROTECHNICAL COMMISSION SYSTEM FOR**

**CERTIFICATION TO STANDARDS RELATING TO EQUIPENT FOR USE**

**IN EXPLOSIVE ATMOSPHERES (IECEx SYSTEM)**

**Circulated to: IECEx Management Committee (ExMC)**

**Title: US Comment to ExMC 2022 Agenda Item 8.6 ExMC WG19 Report “Hydrogen Technologies”**

This document contains comments from the USNC/IECEx received by the Secretariat via email on 17 August 2022, concerning the ExMC WG19 Report and proposal for new Draft OD 0290 (ExMC/1842A/DV).

These comments are to be considered during both the ExMC 2022 Remote meetings.

IECEx Secretariat

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09 August 2022

###### VIA E-MAIL TRANSMISSION

Mr. Chris Agius

IECEx Secretariat

c/o IEC Central Office

3, rue de Varembé

P.O. BOX 131

CH-1211 Geneva 20, Switzerland

**Subject:** USNC/IECEx Comment on Item 8.6 of the 2022 ExMC Meeting Agenda: IECEx application to the Hydrogen economy – ExMC WG19

Dear Chris:

The USNC/IECEx would like to thank ExMC WG019 for the preparation of edition 1.0 of IECEx OD 290 (ExMC/1842A/DV) and consideration of previous U.S. comments (ExMC/1851/CC).

Because ExMC/1842A/DV was posted on 2022-07-26, less than eight weeks before the IECEx ExMC meeting was provided to consider the revised OD. Per Clause 7.5 of IEC CA 01, the USNC/IECEx requests that ExMC/1842A/DV be circulated instead of voting at the IECEx ExMC meeting.

The USNC/IECEx is providing four items for consideration by the member bodies as well as ExMC WG19.

1. Clause 11 of IEC CA 01 states that the CA Systems are generally based on the use of International Standards, published by IEC and ISO, except when there are none available and approval of CAB has been obtained.

Recent CAB Decision 51/17 from CAB/2224/DL states “CAB approved the proposed recommendation relative to the use of draft IEC or ISO standards. CAB also approved the recommendation to integrate the text in recommendation into IEC CAB-P01, in clause 5.6 or a new clause 5.7, and tasked CAB WG 10 with submitting a proposal in this regard for CAB approval at its June 2023 meeting.”

ExMC/1842A/CD currently contains embedded standard requirements, which is not in alignment with the intent of IEC CA 01 or the recent CAB decision. Therefore, USNC/IECEx recommends changing the approach in ExMC/1842A/CD from embedding the requirements in Annex A to referencing the draft ISO 19880-2 standard directly for the requirements and getting the approval of CAB. In addition, USNC/IECEx proposes that the ExTR template refer to the draft ISO 19880-2 standard instead of IECEx OD 290.

1. Comment US-3 from ExMC/1851/CC for refuelling has not been fully addressed. ISO 14687, Hydrogen fuel quality — Product specification - First edition, does not address the concerns related to hydrogen refueling protocols. If ExMC accepts the inclusion of the entire draft ISO 19880-2 standard as proposed in item 1, then the concerns related to hydrogen refueling protocols will be addressed.
2. Comment US-11 from ExMC/1851/CC for specific component parts has not been fully addressed. USNC/IECEx proposes that the draft ISO 19880-2 ExTR proposed in item 1 be completed for specific component parts and the additional sentence be added to Clause 7.1:

## 7.1 Treatment of Equipment, Components and systems associated with gaseous hydrogen, other than hydrogen fuel dispensers.

Manufacturers may apply for an IECEx Certificate of Conformity for compliance to an International ISO or IEC standard related to gaseous hydrogen, to an ExCB, in accordance with the IECEx Scheme rules of IECEx 02 and related IECEx Operational Documents, eg OD 009 and provide the ExCB with the information and detail specified in Clause 6 above.

Where an IEC or ISO standard dedicated to the equipment, component or systems application to hydrogen exists then that IEC or ISO standard shall be used.

Where no dedicated ISO or IEC Standard exists for the equipment, component or system then ISO 80079-36 or ISO 80079-37 shall be used. In addition, the general material requirements and the applicable clauses of ISO 19880-2, including routine tests, shall be applied with respect to parts that are in contact with hydrogen.

* + 1. The USNC/IECEx supports further exploration of WG19’s work for IECEx coverage of products, systems and services associated with the use of hydrogen as noted in Recommendation 3 of ExMC/1868/R. However, the USNC/IECEx proposes that future standards be approved by ExMC on a case-by-case basis.

Thank you for your attention to this matter. Please contact me if you have any questions.

Sincerely,

Mike Leibowitz

USNC/IECEx Secretary

MGL

cc: S. Kiddle