# Commission Regulation (EU) 2016/1388 of 17 August 2016 establishing a Network Code on Demand Connection (Text with EEA relevance)

# TITLE IV

## COMPLIANCE

# CHAPTER 2

## Compliance testing

## Article 36

## **Common provisions for compliance testing**

1 Testing of the performance of a transmission-connected demand facility, a transmission-connected distribution facility, or a demand unit with demand response active power control, demand response reactive power control or demand response transmission constraint management, shall aim at demonstrating that the requirements of this Regulation have been complied with.

2 Notwithstanding the minimum requirements for compliance testing set out in this Regulation, the relevant system operator is entitled to:

- a allow the demand facility owner, the DSO or the CDSO to carry out an alternative set of tests, provided that those tests are efficient and suffice to demonstrate that a demand facility or a distribution system complies with the requirements of this Regulation; and
- b require the demand facility owner, the DSO or the CDSO to carry out additional or alternative sets of tests in those cases where the information supplied to the relevant system operator in relation to compliance testing under the provisions of Articles 37 to 41, is not sufficient to demonstrate compliance with the requirements of this Regulation.

3 The demand facility owner, the DSO or the CDSO is responsible for carrying out the tests in accordance with the conditions laid down in Chapter 2 of Title IV. The relevant system operator shall cooperate and not unduly delay the performance of the tests.

4 The relevant system operator may participate in the compliance testing either on site or remotely from the system operator's control room. For that purpose, the demand facility owner, the DSO or the CDSO shall provide the monitoring equipment necessary to record all relevant test signals and measurements as well as ensure that the necessary representatives of the demand facility owner, the DSO or the CDSO are available on site for the entire testing period. Signals specified by the relevant system operator shall be provided if, for selected tests, the system operator wishes to use its own equipment to record performance. The relevant system operator has sole discretion to decide about its participation. **Changes to legislation:** There are outstanding changes not yet made to Commission Regulation (EU) 2016/1388. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

## Article 37

### Compliance testing for disconnection and reconnection of transmission-connected distribution facilities

1 The transmission-connected distribution facilities shall comply with the requirements for disconnection and reconnection referred in Article 19 and shall be subject to the following compliance tests.

2 With regard to testing of the capability of reconnection after an incidental disconnection due to a network disturbance, reconnection shall be achieved through a reconnection procedure, preferably by automation, authorised by the relevant TSO.

3 With regard to the synchronisation test, the technical synchronisation capabilities of the transmission-connected distribution facility shall be demonstrated. This test shall verify the settings of the synchronisation devices. This test shall cover the following matters: voltage, frequency, phase angle range, deviation of voltage and frequency.

4 With regard to the remote disconnection test, the transmission-connected distribution facility's technical capability for remote disconnection at the connection point or points from the transmission system when required by the relevant TSO and within the time specified by the relevant TSO shall be demonstrated.

5 With regard to the low frequency demand disconnection test, the transmissionconnected distribution facility's technical capability of low frequency demand disconnection of a percentage of demand to be specified by the relevant TSO, in coordination with adjacent TSOs, where equipped as provided for in Article 19, shall be demonstrated.

6 With regard to the low frequency demand disconnection relays test, the transmissionconnected distribution facility's technical capability to operate from a nominal AC supply input shall be demonstrated in accordance with Article 19(1) and (2). This AC supply input shall be specified by the relevant TSO.

7 With regard to the low voltage demand disconnection test, the transmission-connected distribution facility's technical capability to operate in a single action with on load tap changer blocking in Article 19(3) shall be demonstrated in accordance with Article 19(2).

8 An equipment certificate may be used instead of part of the tests provided for in paragraph 1, on the condition that it is provided to the relevant TSO.

## Article 38

# Compliance testing for information exchange of transmission-connected distribution facilities

1 With regard to information exchange between the relevant TSO and the transmissionconnected distribution system operator in real time or periodically, the transmission-connected distribution facility's technical capability to comply with the information exchange standard established pursuant to Article 18(3) shall be demonstrated.

2 An equipment certificate may be used instead of part of the tests provided for in paragraph 1, on the condition that it is provided to the relevant TSO.

**Changes to legislation:** There are outstanding changes not yet made to Commission Regulation (EU) 2016/1388. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

### Article 39

#### Compliance testing for disconnection and reconnection of transmission-connected demand facilities

1 The transmission-connected demand facilities shall comply with the requirements for disconnection and reconnection referred to in Article 19 and shall be subject to the following compliance tests.

2 With regard to testing of the capability of reconnection after an incidental disconnection due to a network disturbance, reconnection shall be achieved through a reconnection procedure, preferably by automation, authorised by the relevant TSO.

3 With regard to the synchronisation test, the technical synchronisation capabilities of the transmission-connected demand facility shall be demonstrated. This test shall verify the settings of the synchronisation devices. This test shall cover the following matters: voltage, frequency, phase angle range, deviation of voltage and frequency.

4 With regard to the remote disconnection test, the transmission-connected demand facility's technical capability for remote disconnection at the connection point or points from the transmission system when required by the relevant TSO and within the time specified by the relevant TSO shall be demonstrated.

5 With regard to the low frequency demand disconnection relays test, the transmissionconnected demand facility's technical capability to operate from a nominal AC input shall be demonstrated in accordance with Article 19(1) and (2). This AC supply input shall be specified by the relevant TSO.

6 With regard to the low voltage demand disconnection test, the transmission-connected demand facility's technical capability to operate in a single action with on load tap changer blocking in Article 19(3) shall be demonstrated in accordance with Article 19(2).

7 An equipment certificate may be used instead of part of the tests provided for in paragraph 1, on the condition that it is provided to the relevant TSO.

#### Article 40

# Compliance testing for information exchange of transmission-connected demand facilities

1 With regard to information exchange between the relevant TSO and the transmissionconnected demand facility owner in real time or periodically, the transmission-connected demand facility's technical capability to comply with the information exchange standard established pursuant to Article 18(3) shall be demonstrated.

2 An equipment certificate may be used instead of part of the tests provided for in paragraph 1, on the condition that it is provided to the relevant TSO.

**Changes to legislation:** There are outstanding changes not yet made to Commission Regulation (EU) 2016/1388. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes

### Article 41

### Compliance testing for demand units with demand response active power control, reactive power control and transmission constraint management

With regard to the demand modification test:

- a the technical capability of the demand unit used by a demand facility or a closed distribution system to provide demand response active power control, demand response reactive power control or demand response transmission constraint management to modify its power consumption, after receiving an instruction from the relevant system operator or relevant TSO, within the range, duration and time frame previously agreed and established in accordance with Article 28, shall be demonstrated, either individually or collectively as part of demand aggregation through a third party;
- b the test shall be carried out either by an instruction or alternatively by simulating the receipt of an instruction from the relevant system operator or relevant TSO and adjusting the power demand of the demand facility or the closed distribution system;
- c the test shall be deemed passed, provided that the conditions specified by the relevant system operator or relevant TSO pursuant to Article 28(2)(d)(f)(g)(h)(k) and (l) are fulfilled;
- d an equipment certificate may be used instead of part of the tests provided for in paragraph 1(b), on the condition that it is provided to the relevant system operator or relevant TSO.
- With regard to the disconnection or reconnection of static compensation facilities test:
- a the technical capability of the demand unit used by a demand facility owner or closed distribution system operator to provide demand response active power control, demand response reactive power control or demand response transmission constraint management to disconnect or reconnect, or both, its static compensation facility when receiving an instruction from the relevant system operator or relevant TSO, in the time frame expected in accordance with Article 28, shall be demonstrated, either individually or collectively as part of demand aggregation through a third party;
- b the test shall be carried out by simulating the receipt of an instruction from the relevant system operator or relevant TSO and subsequently disconnecting the static compensation facility, and by simulating the receipt of an instruction from the relevant system operator or relevant TSO and subsequently reconnecting the facility;
- c the test shall be deemed passed, provided that the conditions specified by the relevant system operator or relevant TSO pursuant to Article 28(2)(d)(f)(g)(h)(k) and (l) are fulfilled.

1

2

There are outstanding changes not yet made to Commission Regulation (EU) 2016/1388. Any changes that have already been made to the legislation appear in the content and are referenced with annotations.

View outstanding changes

#### Changes and effects yet to be applied to :

Regulation revoked by S.I. 2019/533 reg. 5(b) (This amendment not applied to legislation.gov.uk. Reg. 5 revoked on the day before IP completion day by S.I. 2019/1104, regs. 1(2), 2)

# Changes and effects yet to be applied to the whole legislation item and associated provisions

- Title 6 omitted by S.I. 2020/1006 Sch. 2 para. 22
- Signature words omitted by S.I. 2020/1006 Sch. 2 para. 24
- Annex 1 word substituted by S.I. 2020/1006 Sch. 2 para. 25(c)(i)
- Annex 1 word substituted by S.I. 2020/1006 Sch. 2 para. 25(c)(ii)
- Annex 1 word substituted by S.I. 2020/1006 Sch. 2 para. 25(c)(iii)
- Annex 1 word substituted by S.I. 2020/1006 Sch. 2 para. 25(c)(iv)
- Annex 1 word substituted by S.I. 2020/1006 Sch. 2 para. 25(c)(v)
- Annex 1 word substituted by S.I. 2020/1006 Sch. 2 para. 25(c)(vi)
- Annex 1 word substituted by S.I. 2020/1006 Sch. 2 para. 25(c)(vii)
- Annex 1 words omitted by S.I. 2020/1006 Sch. 2 para. 25(a)
- Annex 1 words omitted by S.I. 2020/1006 Sch. 2 para. 25(b)
- Annex 1 words omitted by S.I. 2020/1006 Sch. 2 para. 25(d)
- Annex 1 words omitted by S.I. 2020/1006 Sch. 2 para. 25(e)
- Annex 2 word substituted by S.I. 2020/1006 Sch. 2 para. 26(a)(iii)(aa)
- Annex 2 word substituted by S.I. 2020/1006 Sch. 2 para. 26(a)(iii)(bb)
- Annex 2 word substituted by S.I. 2020/1006 Sch. 2 para. 26(b)(iii)(aa)
- Annex 2 word substituted by S.I. 2020/1006 Sch. 2 para. 26(b)(iii)(bb)
- Annex 2 word substituted by S.I. 2020/1006 Sch. 2 para. 26(b)(iii)(cc)
- Annex 2 words omitted by S.I. 2020/1006 Sch. 2 para. 26(a)(i)
- Annex 2 words omitted by S.I. 2020/1006 Sch. 2 para. 26(a)(ii)
- Annex 2 words omitted by S.I. 2020/1006 Sch. 2 para. 26(a)(iv)
- Annex 2 words omitted by S.I. 2020/1006 Sch. 2 para. 26(a)(v)
- Annex 2 words omitted by S.I. 2020/1006 Sch. 2 para. 26(b)(i)
- Annex 2 words omitted by S.I. 2020/1006 Sch. 2 para. 26(b)(ii)
- Annex 2 words omitted by S.I. 2020/1006 Sch. 2 para. 26(b)(iv)
- Annex 2 words omitted by S.I. 2020/1006 Sch. 2 para. 26(b)(v)
- Art. 2(5) words substituted by S.I. 2020/1006 Sch. 2 para. 1(4)(b)(i)
- Art. 2(5) words substituted by S.I. 2020/1006 Sch. 2 para. 1(4)(b)(ii)
- Art. 3(2)(a) words substituted by S.I. 2020/1006 Sch. 2 para. 2(3)
- Art. 4(1)(a)(iii) word omitted by S.I. 2020/1006 Sch. 2 para. 3(2)(b)(i)
- Art. 4(1)(a)(iii) words omitted by S.I. 2020/1006 Sch. 2 para. 3(2)(b)(ii)
- Art. 4(1)(a)(ii) word omitted by S.I. 2020/1006 Sch. 2 para. 3(2)(a)(i)
  Art. 4(1)(a)(ii) words omitted by S.I. 2020/1006 Sch. 2 para. 3(2)(a)(ii)
- Art. 4(1)(b) words substituted by S.I. 2020/1006 Sch. 2 para. 3(2)(c)
  Art. 4(1)(b) words substituted by S.I. 2020/1006 Sch. 2 para. 3(2)(c)
- Art. 4(2)(b) words substituted by S.I. 2020/1000 Sch. 2 para. 3(2)(c)
  Art. 4(2)(b) words substituted by S.I. 2020/1006 Sch. 2 para. 3(3)(a)(i)
- Art. 4(2)(b) words substituted by S.I. 2020/1000 Sch. 2 para. 3(3)(a)(i)
- Art. 4(2)(b) words substituted by S.I. 2020/1006 Sch. 2 para. 3(3)(a)(iii)
- Art. 4(4)(b) word omitted by S.I. 2020/1006 Sch. 2 para. 3(5)(a)
- Art. 4(4)(b) words omitted by S.I. 2020/1006 Sch. 2 para. 3(5)(b)
- Art. 6(3)(d) words omitted by S.I. 2020/1006 Sch. 2 para. 4(4)(b)
- Art. 6(3)(f) word substituted by S.I. 2020/1006 Sch. 2 para. 4(4)(c)
- Art. 19(1)(c)(i) word substituted by S.I. 2020/1006 Sch. 2 para. 11

-	Art. 29(2)(f) word substituted by S.I. 2020/1006 Sch. 2 para. 12(b)
-	Art. 29(2)(g) word substituted by S.I. 2020/1006 Sch. 2 para. 12(c)(i)
-	Art. 29(2)(g) word substituted by S.I. 2020/1006 Sch. 2 para. 12(c)(ii)
-	Art. 42(3)(a) words substituted by S.I. 2020/1006 Sch. 2 para. 13
-	Art. 48(3)(b) words omitted by S.I. 2020/1006 Sch. 2 para. 14(2)
-	Art. 49(2)(c) words substituted by S.I. 2020/1006 Sch. 2 para. 15