## WG13 Issues - CIM Issues #5047

# Clarifications on equivalents, e.g., EquivalentInjection, ExternalNetworkInjections and the aggregate attribute

09/14/2021 03:48 PM - Herbert Falk

Status: Closed

**Priority:** Normal

Target version:

Author/Contact Info: Standard(s): **Todd Viegut** 61970-301

Base Release: CIM<sub>17</sub> Version: 7.1

Solution to be CIM18v03 Clause: Equivalents

Applied To:

Solution Version: CIM18v03 Sub-Clause: Solution Applied By: Chavdar Ivanov Paragraph:

**Completion Date:** 02/11/2023 Table:

CIM Keywords: 61970-Equivalents **Originally Closed in** 

Version:

**Breaking Change:** No **Origination Date:** 01/14/2020

**Breaking Change** 

**Description:** 

WG13

Groups:

**CIM Impacted** 

**Originally Assigned** 

**Origination ID:** 

13 301

To:

Requestor:

## Description

Per CDV country comments CH 86 for 301 Ed7:

Many TSOs use external network injections which can have distant regulation for modelling distribution network, although it is stated that the class is used for IEC 60909 calculations. It is necessary to specify in which use cases it is suggested to use EquivalentInjection and in which cases ExternalNetworkInjection.

### **Proposed Solution**

Update the descriptions to clarify the usage. Perhaps EquivalentInjections should be used for distribution network equivalenting and not ExternalNetworkInjections, but this needs to be clarified.

Clarifications to be applied in CIM18 because there are multiple uses currently in implementations. Must be discussed with distribution experts. The description should go into the 600 specs as well.

Assign to Energy Model Requirements Subgroup

See additional information:

https://github.com/CIMug-org/WG13InformationModel/issues/5

Update: Feb 2023 by Chavdar 452 and 600 use this constraint

C:452:EQ:EquivalenInjection:instance

Using EquivalentInjection to model a distribution network equivalent is recommended practice instead of using ExternalNetworkInjection-s.

## Decision

14-Jan-2020 Decision to apply the proposed resolution when revving to CIM18

#### **Release Notes**

- Added the following clarification to the EquivalentInjection description

Using EquivalentInjection to model a distribution network equivalent is recommended practice instead of using ExternalNetworkInjection-s if it is not necessary that the equivalent contains detailed information representing a short circuit equivalent according to IEC 60909 which is relevant for short circuit studies.

Added the following clarification to the ExternalNetworkInjection description

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It is only used if EquivalentInjection cannot provide the details required by IEC 60909 on short circuit equivalent of an external network.

- Modeified the following statement in the Equipment aggregate to include ExternalNetworkInjection. The revised version is: The attribute is not used for EquivalentBranch, EquivalentShunt, EquivalentInjection and ExternalNetworkInjection.
- Deleted the folling constraint from 452
- C:452:EQ:EquivalenInjection:instance

Using EquivalentInjection to model a distribution network equivalent is recommended practice instead of using ExternalNetworkInjection-s.

### History

#### #1 - 09/14/2021 06:30 PM - Eric Stephan

- Subject changed from Per CDV country comments CH\_86 for 301 Ed7:

Many TSOs use to Per CDV country comments CH\_86 for 301 Ed7:Many TSOs use

- Proposed Solution updated
- Decision updated

#### #2 - 09/15/2021 11:31 AM - Svein Olsen

- Subject changed from Per CDV country comments CH\_86 for 301 Ed7:Many TSOs use to Equivalent CDV CH\_86 for 301 Ed7
- Description updated
- Standard(s) set to 61970-301
- Version set to 7.1
- Clause set to Equivalents
- Decision updated

### #3 - 12/01/2021 11:42 AM - Eric Stephan

- Proposed Solution updated
- Decision updated
- CIM Keywords 61970-Equivalents added

### #4 - 05/09/2022 10:49 AM - Yang Feng

- Subject changed from Equivalent CDV CH\_86 for 301 Ed7 to Clarifications on equivalents, e.g., EquivalentInjection, ExternalNetworkInjections and the aggregate attribute

# #5 - 09/22/2022 04:20 PM - Svein Olsen

- Proposed Solution updated
- Decision updated

## #6 - 02/11/2023 03:43 AM - Chavdar Ivanov

- Status changed from Open to In Progress
- Proposed Solution updated
- Release Notes updated

## #7 - 02/11/2023 03:48 AM - Chavdar Ivanov

- Solution to be Applied To changed from 61970cim18 to CIM18v03
- Solution Version set to CIM18v03
- Solution Applied By set to Chavdar Ivanov
- Completion Date set to 02/11/2023
- Release Notes updated

## #8 - 02/11/2023 03:48 AM - Chavdar Ivanov

- Status changed from In Progress to Closed

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