WG13 Issues - CIM Issues #6147

[GMDM #1] Streamlining of tank-based transformer modelling

10/04/2022 04:40 AM - Yang Feng

Status:	In Progress		
Priority:	Normal		
Target version:			
Author/Contact Info:	Pat Brown	**Standard(s):**	
Base Release:		**Version:**	
Solution to be Applied To:	CIM19	**Clause:**	
Solution Version:		**Sub-Clause:**	
Solution Applied By:		**Paragraph:**	
Completion Date:		**Table:**	
CIM Keywords:	61968-AssetInfo, 61968-Assets, 61970-Wires	**Originally Closed in Version:**	
Breaking Change:		**Origination Date:**	
Breaking Change Description:	Unclear at the moment	**Origination ID:**	
CIM Impacted Groups:	WG13	**Originally Assigned To:**	Pat Brown
Requestor:	Pat Brown		

Description

Currently, the modelling of an unbalanced (tank-based) transformer can be accomplished in a variety of ways, using a multitude of combinations of classes and associations. The number of possible alternatives is an impediment to interoperability. A number of the classes used in describing transformers for network modelling purposes are also resident in the 61968 package, not the 61970 package, despite the fact that they were designed to support network analysis, not asset management, use cases.
This issue suggests the articulation of a comprehensive, cohesive approach to tank-based transformer modelling which would accomplish the following:

- Support the modelling of tank-based transformers in strictly electrical terms
- Support the modelling of tank-based transformers using test results
- Support the definition of ‘catalog’ information of both kinds of modelling (electrical terms and test results)
- Align with the current balanced (non-tank-based) transformer modelling described by 61970-301 and -452
- Augment the current non-tank-based modelling to allow modelling of those transformers with test results

The net outcome is anticipated to significantly leverage existing classes, attributes and associations. Likely changes include a few new associations that clarify (and support validation of) intended usage, perhaps some moving of attributes from one class to another and the move of a number of classes from the 61968 package to the 61970 package.

Decision

Oslo, 13 June 2023
Proposal for changes will need to be prepared. Possible solution is to copy some of the attributes from info classes to transformer.
Volunteers: Martin, Pat, Jugoslav

18-Sep-2024 Joint TF Hybrid Meetings:
Revisited this issue. Agreed it is CIM19. Celso and Andres volunteered to take this on. Martin volunteers to provide a list properties on the asset side that ought to be on the equipment side.

When we reviewed Redmine issue #6148 today we identified it overlaps. We've closed that issue out and moved its proposed solution here for consideration (and so that it wasn't lost):

3 attributes were copied from TapChangerInfo to TapChanger: .ctRating, .ctRatio and .ptRatio. This obviated the need to include TapChangerInfoobjects in the GMDM profiles and data exchanges.

History

#1 - 10/04/2022 04:41 AM - Yang Feng

- File GMDM 1 - Simplification of electric-parameter-only transformer modeling.docx added

#2 - 02/15/2023 04:46 AM - Pat Brown

- Subject changed from [GMDM] Simplification of electric-parameter-only transformer modeling to [GMDM #1] Simplification of electric-parameter-only transformer modeling

#3 - 05/24/2023 08:37 AM - Pat Brown

- File GMDM 1 - Streamlining of tank-based transformer modelling.docx added

- Subject changed from [GMDM #1] Simplification of electric-parameter-only transformer modeling to [GMDM #1] Streamlining of tank-based transformer modelling

#4 - 05/24/2023 08:38 AM - Pat Brown

- File deleted (GMDM 1 - Simplification of electric-parameter-only transformer modeling.docx)

#5 - 05/24/2023 08:42 AM - Pat Brown

- Description updated

#6 - 06/13/2023 10:01 AM - Chavdar Ivanov

- Decision updated

#7 - 09/04/2024 10:49 AM - Chavdar Ivanov

- Status changed from New to Open

#8 - 09/18/2024 09:04 AM - Todd Viegut

- Status changed from Open to In Progress

- Solution to be Applied To changed from CIM18 to CIM19

- Decision updated

#9 - 09/18/2024 09:26 AM - Todd Viegut

- Decision updated

Files

GMDM 1 - Streamlining of tank-based transformer modelling.docx	1.26 MB	05/24/2023	Pat Brown