WG14 Part 4 Issues - CIM Issues #6870

Cable Info classes

08/13/2024 12:36 PM - Celso Rocha

Status: New

Priority: Normal

Target version:

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Base Release: Version:

Solution to be Clause:

Applied To:

Solution Version:

Sub-Clause:
Paragraph:

Completion Date: Table:

CIM Keywords: 61968-AssetInfo Originally Closed in

Version:

To:

Breaking Change: Origination Date:

Breaking Change Origination ID: Description:

CIM Impacted WG14 Originally Assigned

Groups:

Requestor:

Description

EPRI has identified some gaps in the current cable modeling - CableInfo classes. Those are grouped under the following buckets:

- Lack of flexibility to handle varying cable configurations/layering and associated attributes
- Lack of ability to model materials properties and custom materials
- Lack of clarity on CableConstructionKind
- WireInsulationKind mixes insulation materials with cable installation/construction
- Use of ConductorInfo.massPerLength

The attached *.pdf document describes each of the gaps in detail.

Proposed Solution

The attached *.pdf document includes a detailed proposal to address each of the identified gaps as well as other identified needs that are not addressed in the current modeling.

The proposal involves a redesign of the Cable modeling including a more flexible approach to model different types of layers in a cable and associated materials.

The attached Visio files provides 18 examples on how the proposed classes would be utilized for different types of cables (including HV, MV and LV cables). The examples have been split into two files due to file size constraints.

History

#1 - 09/06/2024 01:27 PM - Celso Rocha

- File 2024-09-06 EPRI - CableInfoProposal.pdf added

Adding updated presentation which includes a slide showing how the proposed supports bundled cables modeling.

Files

2024.08.13 EPRI - CableInfoProposal.pdf	5.66 MB	08/13/2024	Celso Rocha
2024.08.13 EPRI - CableInfoProposal Examples 1 to 9.vsdx	4.83 MB	08/13/2024	Celso Rocha
2024.08.13 EPRI - CableInfoProposal Examples 10 to 18.vsdx	6.95 MB	08/13/2024	Celso Rocha
2024-09-06 EPRI - CableInfoProposal.pdf	6.78 MB	09/06/2024	Celso Rocha

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