WG13 Issues - CIM Issues #6889

Modelling of composite loads

08/28/2024 02:19 AM - Chavdar Ivanov

Status:	Open		
Priority:	High		
Target version:			
Author/Contact Info:	Chavdar Ivanov	**Standard(s):**	
Base Release:		**Version:**	
Solution to be Applied To:		**Clause:**	
Solution Version:		**Sub-Clause:**	
Solution Applied By:		**Paragraph:**	
Completion Date:		**Table:**	
CIM Keywords:	61970-LoadModel	**Originally Closed in Version:**	
Breaking Change:	No	**Origination Date:**	
Breaking Change Description:		**Origination ID:**	
CIM Impacted Groups:	WG13	**Originally Assigned To:**	
Requestor:			

Description

We are using ConformLoad and NonConformLoad to indicate which loads are scalable and which not. We have constraints which do not allow negative loads
When adjusting grid models experts often need to scale loads and there are requests to be able to model negative loads. Part of the problem is that in some cases TSOs do not have information from DSOs
One option is to advise on representing the interfaces with DSOs as ExternalNetworkInjection or another equivalent - but such element will most probably be mapped to a synchronous machine or voltage source element in internal representations of the tools.
We have an option to add a class to represent the composite load model e.g.
https://www.epri.com/research/programs/027570/results/3002019209 which can go negative and we can put the scalability properties to it

In this way we will have
- Conform/NonConform loads - for real identifiable loads
- Equivalents - when we also equivalent portion of a grid and represent expected infeed at a point of the grid
- composite load - which is also soft of aggregation/combination, but can have particular behaviour depending on the content and different portion - motor part, passive part, etc

Related issues:

Related to WG13 Issues - CIM Issues #6995: Add transmission composite load model   **New**

History

#1 - 09/04/2024 10:42 AM - Chavdar Ivanov

- Status changed from New to Open

#2 - 04/16/2025 10:42 AM - Todd Viegut

- Related to CIM Issues #6995: Add transmission composite load model added