WG13 Issues - CIM Issues #4107

Description PhaseTapChangerLinear
The definition of PhaseTa

09/14/2021 03:44 PM - Herbert Falk

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Description

Description PhaseTapChangerLinear
The definition of PhaseTapChangerLinear is not very clear:
o UML states: "Describes a tap changer with a linear relation between the tap step and the phase angle difference across the transformer. This is a mathematical model that is an approximation of a real phase tap changer."
o In my understanding and based on what me do today, PTCSymmetrical and PTCLinear are quite the same thing
o We can keep the two classes of course since each one uses a different formula. but the result is the same
o The definition of PTCLinear does not say anything about the magnitude variation per tap:
What one would logically do is to take stepPhaseShiftIncrement and multiply by the number of taps to obtain the angle. this is what the definition says.
And for the magnitude it would stay constant equal to 1. i.e. exactly like for PTCSymmetrical magnitude.
o In my opinion, the following sentence should then be added to PTCLinear definition: "The secondary side voltage magnitude is the same as at the primary side"

Proposed Solution

Proposed text:
The phase angle is computed as stepPhaseShitfIncrement times the tap position.
The secondary side voltage magnitude is the same as at the primary side.

Decision

Updated 2013-06-01/LOO