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LIST OF SYMBOLS AND ABBREVIATIONS AND NOMENCLATURE

a, b	-	Coefficient of the nonlinear function which represent magnetisation characteristic.
BPA	-	Bonneville Power Administration.
C_{Th}	-	Thévenin equivalent capacitance.
E_{Th}	-	Peak value of Thévenin equivalent voltage.
h_0, h_1, h_2, h_3	-	Coefficients of the nonlinear function which represent the core loss resistance.
i	-	Instantaneous current through an element.
i_{AR}	-	Current through the arrester.
I_{Np}	-	Peak value of Norton source.
k, α	-	Arrester parameters.
L_2	-	Transformer leakage inductance.
L_m	-	Magnetising inductance.
NS	-	Neimark-Sacker bifurcation point.
PF	-	Pitchfork (symmetry breaking) bifurcation point.
\mathbf{p}	-	Time derivative operator.
q	-	Degree of transformer saturation characteristic.
R_2	-	Transformer winding resistance.
RK4	-	fourth order Runge-Kutta method.
R_m	-	Core loss resistance.
v	-	Instantaneous voltage across an element.
x_i	-	The i^{th} state variable.
ϕ	-	Instantaneous flux linkage through nonlinear inductor.
μ	-	Bifurcation parameter.