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## LIST OF SYMBOLS

$\alpha$	-	Attenuation constant [Nepers/m]
$Y$	-	Admittance [ $\bar{\Omega}$ ]
$C$	-	Capacitance [F]
$Z_0$	-	Characteristic impedance [ $\Omega$ ]
$G$	-	Conductance [ $\bar{\Omega}$ ]
$L$	-	Inductance [H]
$\Psi$	-	Mother Wavelet
$v$	-	Propagation speed [km/s]
$\gamma$	-	Propagation constant
$R$	-	Resistance [ $\Omega$ ]
$t$	-	Time [s]
$i_0$	-	
$D$	-	Distance [km]



## LIST OF ABBREVIATIONS

EHV	-	Extra High Voltage
EMTDC	-	Electromagnetic Transient Direct Current Analysis
PSCAD	-	Power Systems Computer Aided Design
GPS	-	Global Positioning System
ATP	-	Alternative Transients Program
ATPDraw	-	A preprocessor for ATP
CCA	-	Cross Correlation Analysis
CWT	-	Continuous Wavelet Transform
DFT	-	Discrete Fourier Transform
DWT	-	Discrete Wavelet Transform
EMTP	-	Electromagnetic Transient Program
FFT	-	Fast Fourier Transform
STFT	-	Short Time Fourier Transform
TW	-	Travelling Wave
TWR	-	Travelling Wave Recorder
TDR	-	Time Domain Reflectometry
$t_s$		Sampling Time [sec]
$t_i$	-	Current transformation matrix
WTC	-	Wavelet Transform Coefficients
WCF	-	Wavelet Correlation Function

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