



# Current ASPEN Settings

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# ASPEN Settings

Preferences

Network | Diagram | Relay | Fault Simulation | X/R | User-defined Data Fields

Prefault Voltage

Assumed "Flat" with  
V (pu) =

From a linear network solution

From a Power Flow solution

Ignore in Short Circuits

Loads

Transmission line G+jB

Shunts with + seq values

Transformer line shunts

Generator Impedance

MOV-Protected Series Capacitors

Iterate short circuit solutions

Acceleration factor =

Define Fault MVA As Product of

Current Limited Generators

Ignore Mutuals < This Threshold

pu

Simulate voltage-controlled current sources

Simulate converter-interfaced resources

Simulate type-3 wind plants

Do not change display quantity when browsing fault results

Include outaged branches in solution summary in TTY Window

OK Cancel

# Fault Simulation

Entity	Switch Impedance	PreFault Voltage	Ignore in SC	MOV Protected Series Cap	Current Limited Generators
Entity 1	1.00E-06	Flat 1pu	ALL	Not Checked	Ignore Current Limits
Entity 2	1.00E-05	Linear	Loads, Transmission Lines	Box checked	Enforce Current Limit A
Entity 3	1.00E-03	Linear	Loads, Transmission, Shunts	Box checked	Ignore Current Limits
Entity 4	1.00E-05	Flat 1pu	None	Box checked	Ignore Current Limits
Entity 5	1.00E-04	Linear	Loads	Box checked	Enforce Current Limit A
Entity 6	1.00E-03	Flat 1pu	None	Not Checked	Ignore Current Limits
Entity 7	1.00E-05	Linear	Loads	Not Checked	Enforce Current Limit A
Entity 8	1.00E-04	Flat 1.05pu	None	Box checked	Ignore Current Limits
Entity 9	1.00E-03	Linear	Loads, Transmission, Shunts	Box checked	Ignore Current Limits
Entity 10	1.00E-03	Linear	ALL	Box checked	Enforce Current Limit A
Entity 11	1.00E-06	Flat 1pu	ALL	Not Checked	Ignore Current Limits
Entity 12	1.00E-03	Linear	None	Box checked	Enforce Current Limit A
Entity 13	1.00E-05	Linear	Loads	Box checked	Enforce Current Limit A
Entity 14	1.00E-04	Linear	None	Box checked	Enforce Current Limit A
Entity 15	1.00E-05	Flat 1.05pu	ALL	Box checked	Ignore Current Limits
Entity 16	1.00E-05	Linear	None	Box checked	Enforce Current Limit A
Entity 17	1.00E-06	Flat 1pu	None	Not Checked	Ignore Current Limits
Entity 18	1.00E-06	Flat 1pu	None	Not Checked	Ignore Current Limits
Entity 19	1.00E-06	Linear	None	Box checked	Enforce Current Limit A
Entity 20	1.00E-05	Flat 1pu	ALL	Box checked	Ignore Current Limits
Entity 21	1.00E-05	Linear	Loads, Transmission Lines	Box checked	Enforce Current Limit A
Entity 22	1.00E-05	Linear	ALL	Box checked	Ignore Current Limits
Entity 23	1.00E-05	Flat 1pu	None	Box checked	Ignore Current Limits
Entity 24	1.00E-05	Linear	Loads, Shunts, XFMR line Shunts	Box checked	Enforce Current Limit A
Entity 25	1.00E-05	Linear	ALL	Box checked	Enforce Current Limit A
Entity 26	1.00E-03	Linear	None	Box checked	Enforce Current Limit A

# X/R

Preferences ✕

Network | Diagram | Relay | Fault Simulation | **X/R** | User-defined Data Fields

Compute ANSI x/r ratio

Assume Z2 equals Z1 for ANSI x/r calculation

X-only calculation

If X is 0 use: X =  p.u.

R-only calculation

If R is 0 use:

Method 1:  $R = \max(X/g, R_c)$

Method 2:  $R = R_c$

Method 3:  $R = \min(X/g, R_c)$

Where:

$R_c =$   p.u.

Typical X/R ratio (g) =  for generators

for transformers

for reactors

for all others

# X/R

Entity	Compute ANSI x/Ratio	Assume Z2 = Z1	R Calc Method	Ratio Gen	Ratio XFMR
Entity 1	Not Checked	Box checked	Method 2	50	30
Entity 2	Box checked	Box checked	Method 2	50	30
Entity 3	Box checked	Box checked	Method 2	10	10
Entity 4	Not Checked	Box checked	Method 2	50	30
Entity 5	Box checked	Not Checked	Method 1	50	30
Entity 6	Not Checked	Box checked	Method 2	50	30
Entity 7	Box Checked	Box checked	Method 2	10	10
Entity 8	Not Checked	Box checked	Method 2	50	30
Entity 9	Box checked	Box checked	Method 2	10	10
Entity 10	Not Checked	Box checked	Method 2	50	30
Entity 11	Not Checked	Box checked	Method 2	50	30
Entity 12	Box checked	Box checked	Method 3	80	90
Entity 13	Not Checked	Box checked	Method 2	50	30
Entity 14	Box checked	Box checked	Method 2	50	30
Entity 15	Box checked	Box checked	Method 2	50	30
Entity 16	Box checked	Box checked	Method 2	50	30
Entity 17	Not Checked	Box checked	Method 2	50	30
Entity 18	Not Checked	Box checked	Method 2	50	30
Entity 19	Not Checked	Box checked	Method 2	50	30
Entity 20	Not Checked	Box checked	Method 2	50	30
Entity 21	Box checked	Box checked	Method 2	50	30
Entity 22	Not Checked	Box checked	Method 2	50	30
Entity 23	Not Checked	Box checked	Method 2	50	30
Entity 24	Not Checked	Box checked	Method 2	50	30
Entity 25	Not Checked	Box checked	Method 2	50	30
Entity 26	Not Checked	Box checked	Method 2	50	30

# Short Circuit User Preparation Resource SUPR

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