

LSPS Susol Design Report

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· Company :	UNIVERSIDAD INDUSTRIAL DE SANTANDER
· Version :	



VIL

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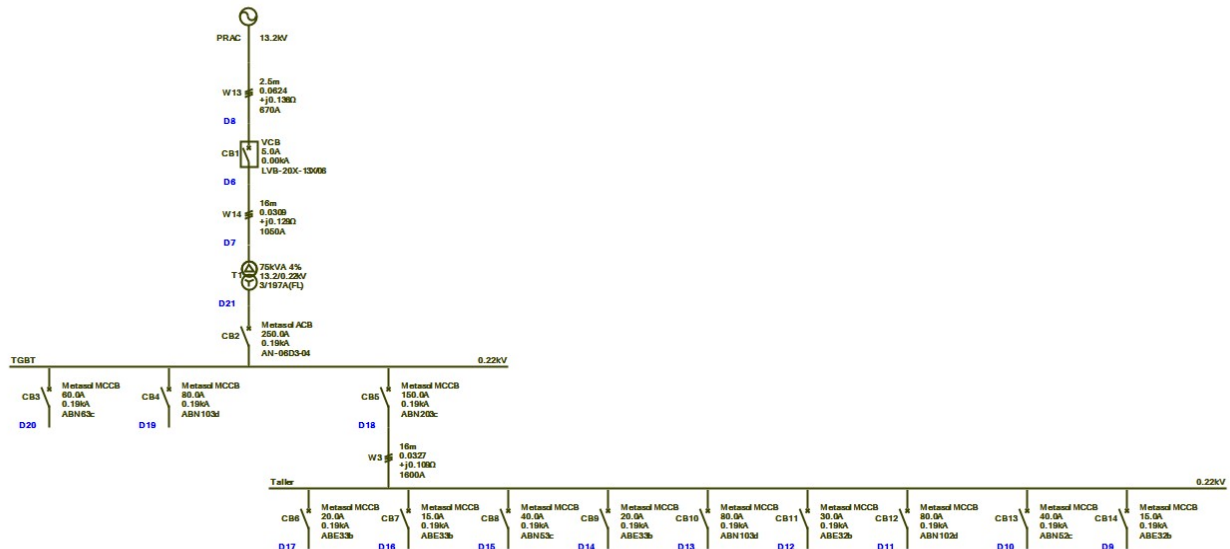
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1. Introduction

Index

- 1. I_k'' : initial symmetrical short-circuit current
r.m.s. value of the a.c. symmetrical component of a prospective (available) short-circuit current
- 2. I_p : peak short-circuit current
maximum possible instantaneous value of the prospective (available) short-circuit current
- 3. I_{bsym} : Symmetrical short-circuit breaking current
- 4. I_{basym} : Asymmetrical short-circuit breaking current
- 5. I_k : Steady-state short-circuit current
- 6. I_{dc} : decaying component of short-circuit current

2. Configuration



3. System summary

System Information

- Base kVA : 1000 kVA - Systemp Hz : 60 Hz - Fault impedance: 0 Ω	Eq. Power Sc	Total No. :	1	EA
		Min. SC curr :	0	MVA
		Max. SC curr :	0	MVA
	Generator	Total No. :	0	EA
		Effective cap :	0	kVA
		Total capacit :	0	kVA
	Transformer	Total No. :	1	EA
		Total capacit :	75	kVA
	Cable	3φ cable len :	34.50	m
		1φ cable len :	0.00	m
		Total length :	34.50	m
	Motor	Total No. :	0	EA
		Min. capacity :	-	kW
		Max. capacit :	-	kW
		Total capacit :	0	kW
	Fuse	Total No. :	0	EA
		Min. current :	-	A
		Max. current :	-	A
	Relay	Total No. :	0	EA
	Load	Total No. :	0	EA
	Switches	Total No. :	14	EA
	LBS	Total No. :	0	EA
	ATLS	Total No. :	0	EA
	Capacitors	Total No. :	0	EA
	Reactor	Total No. :	0	EA

PV	Total No. :	0	EA
	Effective cap:	0	kVA
	Total capacit:	0	kVA
WIND	Total No. :	0	EA
	Effective cap:	0	kVA
	Total capacit:	0	kVA
BESS	Total No. :	0	EA
	Effective cap:	0	kVA
	Total capacit:	0	kVA

Eq. Power Source

Name	Voltage(kV)	Positive		Negative		Zero	
		%R	%X	%R	%X	%R	%X
PRAC	13.2	421.637	1264.91	421.637	1264.91	421.637	1264.91

Transformer

Name	Connectivity		Voltage(kV)		DB Use	Connection		Positive		Negative		Zero	
	From	To	Pri.	Sec.		Pri.	Sec.	%R	%X	%R	%X	%R	%X
T1	W14	CB2	13.2	0.22	N	Δ	Wye(G)	10.2235	52.3443	10.2235	52.3443	10.2235	52.3443

Cable

Name	Connectivity		Voltage DB Use		Length (m)	Thermal Limit(A)	Pos.(Neg.)		Zero	
	From	To	(kV)				%R	%X	%R	%X
W3	D18	Taller	0.22	Y	16	1600	1.08099	3.60331	2.16198	7.20661
W13	PRAC	D8	13.2	Y	2.5	670	8.95317	0.00019	0.00017	0.00039
W14	D6	D7	13.2	Y	16	1050	0.00028	0.00118	0.00056	0.00236

5. LVC and M/C selection

Circuit breaker selection of medium voltage

Name	CB Name	CB Type	AF (A)	Inmax (A)	Icu (kA)	Version	Phase distance/Compatibility
CB1	LVB-20X-13X/06	Total	1250	630	12.5	Fixed	210mm

Circuit breaker selection of low voltage

Name	CB Name	CB Type	AF (A)	Inmax (A)	Icu (kA)	Rating Current	Continuous Rated Current	Long Delay I_long	T_long	Short Delay I_m	T_m	Inst. I_t	T_t
CB2	AN-06D3-04	Metasol ACB	630	400	65	400	400	400	99999	3.99996	0.4	3.99996	0.05
CB3	ABN63c	Metasol MCCB Thermal(Fixed)	60	60	30							5.99994	e+006
CB4	ABN103d	Metasol MCCB Thermal(Fixed)	100	100	15							9.9999	e+006
CB5	ABN203c	Metasol MCCB Thermal(Fixed)	250	150	65							1.49999	e+007
CB6	ABE33b	Metasol MCCB Thermal(Fixed)	30	20	5							1.99998	e+006
CB7	ABE33b	Metasol MCCB Thermal(Fixed)	30	15	5							1.49999	e+006
CB8	ABN53c	Metasol MCCB Thermal(Fixed)	50	40	30							3.99996	e+006
CB9	ABE33b	Metasol MCCB Thermal(Fixed)	30	20	5							1.99998	e+006
CB10	ABN103d	Metasol MCCB Thermal(Fixed)	100	100	15							9.9999	e+006
CB11	ABE32b	Metasol MCCB Thermal(Fixed)	30	30	5							2.99997	e+006
CB12	ABN102d	Metasol MCCB Thermal(Fixed)	100	100	15							9.9999	e+006
CB13	ABN52c	Metasol MCCB Thermal(Fixed)	50	40	30							3.99996	e+006
CB14	ABE32b	Metasol MCCB Thermal(Fixed)	30	15	5							1.49999	e+006

11. Short-circuit currents of each bus

Three Phase Fault

Fault bus	Phase	I(p)	1/2cycles			3cycles			5cycles			Steady State			
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R
D21	A	426	3.05	189	95	212									
	B	426	3.05	189	95	212									
	C	426	3.05	189	95	212									
D20	A	426	3.05	189	95	212									
	B	426	3.05	189	95	212									
	C	426	3.05	189	95	212									
D19	A	426	3.05	189	95	212									
	B	426	3.05	189	95	212									
	C	426	3.05	189	95	212									
D18	A	426	3.05	189	95	212									
	B	426	3.05	189	95	212									
	C	426	3.05	189	95	212									
D17	A	425	3.05	188	95	211									
	B	425	3.05	188	95	211									
	C	425	3.05	188	95	211									
D16	A	425	3.05	188	95	211									
	B	425	3.05	188	95	211									
	C	425	3.05	188	95	211									
D15	A	425	3.05	188	95	211									
	B	425	3.05	188	95	211									
	C	425	3.05	188	95	211									
D14	A	425	3.05	188	95	211									
	B	425	3.05	188	95	211									
	C	425	3.05	188	95	211									

D13	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211
D12	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211
D11	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211
D10	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211
PRAC	A	7	3.00	3	1	3
	B	7	3.00	3	1	3
	C	7	3.00	3	1	3
TGBT	A	426	3.05	189	95	212
	B	426	3.05	189	95	212
	C	426	3.05	189	95	212
Taller	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

12. 10. Short-circuit currents of each branch

Three Phase Fault

Fault bus: D21

From-To (Circuit)	Pha I(p)		1/2cycles			3cycles			5cycles			Steady State			
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R
Name: W14															
D6-D7(0)	A	7	3.05	3	1	3									
	B	7	3.05	3	1	3									
	C	7	3.05	3	1	3									
Name: CB1															
D8-D6(0)	A	7	3.05	3	1	3									
	B	7	3.05	3	1	3									
	C	7	3.05	3	1	3									
Name: W13															
PRAC-D8(0)	A	7	3.05	3	1	3									
	B	7	3.05	3	1	3									
	C	7	3.05	3	1	3									
Name: CB14															
Taller-D9(0)	A	0	0.00	0	0	0									
	B	0	0.00	0	0	0									
	C	0	0.00	0	0	0									
Name: CB13															
Taller-D10(0)	A	0	0.00	0	0	0									
	B	0	0.00	0	0	0									
	C	0	0.00	0	0	0									
Name: CB12															
Taller-D11(0)	A	0	0.00	0	0	0									
	B	0	0.00	0	0	0									
	C	0	0.00	0	0	0									

Name: CB11

Taller-D12(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB10

Taller-D13(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB9

Taller-D14(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB8

Taller-D15(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB7

Taller-D16(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB6

Taller-D17(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: W3

D18-Taller(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB5

TGBT-D18(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB4

TGBT-D19(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB3

TGBT-D20(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB2

D21-TGBT(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: T1

D7-D21(0)	A	426	3.05	189	95	212
	B	426	3.05	189	95	212
	C	426	3.05	189	95	212

Fault bus: D20

From-To (Circuit)	Pha	I(p)	1/2cycles		3cycles			5cycles			Steady State				
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R
Name: W14															
D6-D7(0)	A	7	3.05	3	1	3									
	B	7	3.05	3	1	3									
	C	7	3.05	3	1	3									

Name: CB1

D8-D6(0)	A	7	3.05	3	1	3
	B	7	3.05	3	1	3
	C	7	3.05	3	1	3

Name: W13

PRAC-D8(0)	A	7	3.05	3	1	3
	B	7	3.05	3	1	3
	C	7	3.05	3	1	3

Name: CB14

Taller-D9(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB13

Taller-D10(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB12

Taller-D11(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB11

Taller-D12(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB10

Taller-D13(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB9

Taller-D14(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB8

Taller-D15(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB7

Taller-D16(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB6

Taller-D17(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: W3

D18-Taller(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB5

TGBT-D18(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB4

TGBT-D19(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB3

TGBT-D20(0)	A	426	3.05	189	95	212
	B	426	3.05	189	95	212
	C	426	3.05	189	95	212

Name: CB2

D21-TGBT(0)	A	426	3.05	189	95	212
	B	426	3.05	189	95	212
	C	426	3.05	189	95	212

Name: T1

D7-D21(0)	A	426	3.05	189	95	212
	B	426	3.05	189	95	212
	C	426	3.05	189	95	212

Fault bus: D19

From-To (Circuit)	Pha I(p)		1/2cycles		3cycles			5cycles			Steady State					
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(steady)
Name: W14																
D6-D7(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: CB1																
D8-D6(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: W13																
PRAC-D8(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										

Name: CB14

Taller-D9(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB13

Taller-D10(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB12

Taller-D11(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB11

Taller-D12(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB10

Taller-D13(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB9

Taller-D14(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB8

Taller-D15(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB7

Taller-D16(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB6

Taller-D17(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: W3

D18-Taller(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB5

TGBT-D18(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB4

TGBT-D19(0)	A	426	3.05	189	95	212
	B	426	3.05	189	95	212
	C	426	3.05	189	95	212

Name: CB3

TGBT-D20(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB2

D21-TGBT(0)	A	426	3.05	189	95	212
	B	426	3.05	189	95	212
	C	426	3.05	189	95	212

Name: T1

D7-D21(0)	A	426	3.05	189	95	212
	B	426	3.05	189	95	212
	C	426	3.05	189	95	212

Fault bus: D18

From-To (Circuit)	Pha I(p)		1/2cycles			3cycles			5cycles			Steady State				
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(steady)
Name: W14																
D6-D7(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: CB1																
D8-D6(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: W13																
PRAC-D8(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: CB14																
Taller-D9(0)	A	0	0.00	0	0	0										
	B	0	0.00	0	0	0										
	C	0	0.00	0	0	0										
Name: CB13																
Taller-D10(0)	A	0	0.00	0	0	0										
	B	0	0.00	0	0	0										
	C	0	0.00	0	0	0										

Name: CB12

Taller-D11(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB11

Taller-D12(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB10

Taller-D13(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB9

Taller-D14(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB8

Taller-D15(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB7

Taller-D16(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB6

Taller-D17(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: W3

D18-Taller(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB5

TGBT-D18(0)	A	426	3.05	189	95	212
	B	426	3.05	189	95	212
	C	426	3.05	189	95	212

Name: CB4

TGBT-D19(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB3

TGBT-D20(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB2

D21-TGBT(0)	A	426	3.05	189	95	212
	B	426	3.05	189	95	212
	C	426	3.05	189	95	212

Name: T1

D7-D21(0)	A	426	3.05	189	95	212
	B	426	3.05	189	95	212
	C	426	3.05	189	95	212

Fault bus: D17

From-To (Circuit)	Pha	I(p)	1/2cycles		3cycles			5cycles			Steady State		
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(steady)

Name: W14

D6-D7(0)	A	7	3.05	3	1	3
	B	7	3.05	3	1	3
	C	7	3.05	3	1	3

Name: CB1

D8-D6(0)	A	7	3.05	3	1	3
	B	7	3.05	3	1	3
	C	7	3.05	3	1	3

Name: W13

PRAC-D8(0)	A	7	3.05	3	1	3
	B	7	3.05	3	1	3
	C	7	3.05	3	1	3

Name: CB14

Taller-D9(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB13

Taller-D10(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB12

Taller-D11(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB11

Taller-D12(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB10

Taller-D13(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB9

Taller-D14(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB8

Taller-D15(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB7

Taller-D16(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB6

Taller-D17(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: W3

D18-Taller(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB5

TGBT-D18(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB4

TGBT-D19(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB3

TGBT-D20(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB2

D21-TGBT(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: T1

D7-D21(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Fault bus: D16

From-To (Circuit)	Pha I(p)		1/2cycles			3cycles			5cycles			Steady State				
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(steady)
Name: W14																
D6-D7(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: CB1																
D8-D6(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										

Name: W13

PRAC-D8(0)	A	7	3.05	3	1	3
	B	7	3.05	3	1	3
	C	7	3.05	3	1	3

Name: CB14

Taller-D9(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB13

Taller-D10(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB12

Taller-D11(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB11

Taller-D12(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB10

Taller-D13(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB9

Taller-D14(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB8

Taller-D15(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB7

Taller-D16(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB6

Taller-D17(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: W3

D18-Taller(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB5

TGBT-D18(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB4

TGBT-D19(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB3

TGBT-D20(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB2

D21-TGBT(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: T1

D7-D21(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Fault bus: D15

From-To (Circuit)	Pha I(p)		1/2cycles		3cycles			5cycles			Steady State					
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(steady)
Name: W14																
D6-D7(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: CB1																
D8-D6(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: W13																
PRAC-D8(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: CB14																
Taller-D9(0)	A	0	0.00	0	0	0										
	B	0	0.00	0	0	0										
	C	0	0.00	0	0	0										

Name: CB13

Taller-D10(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB12

Taller-D11(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB11

Taller-D12(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB10

Taller-D13(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB9

Taller-D14(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB8

Taller-D15(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB7

Taller-D16(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB6

Taller-D17(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: W3

D18-Taller(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB5

TGBT-D18(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB4

TGBT-D19(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB3

TGBT-D20(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB2

D21-TGBT(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: T1

D7-D21(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Fault bus: D14

From-To (Circuit)	Pha I(p)		1/2cycles			3cycles			5cycles			Steady State				
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(steady)
Name: W14																
D6-D7(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: CB1																
D8-D6(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: W13																
PRAC-D8(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: CB14																
Taller-D9(0)	A	0	0.00	0	0	0										
	B	0	0.00	0	0	0										
	C	0	0.00	0	0	0										
Name: CB13																
Taller-D10(0)	A	0	0.00	0	0	0										
	B	0	0.00	0	0	0										
	C	0	0.00	0	0	0										
Name: CB12																
Taller-D11(0)	A	0	0.00	0	0	0										
	B	0	0.00	0	0	0										
	C	0	0.00	0	0	0										

Name: CB11

Taller-D12(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB10

Taller-D13(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB9

Taller-D14(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB8

Taller-D15(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB7

Taller-D16(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB6

Taller-D17(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: W3

D18-Taller(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB5

TGBT-D18(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB4

TGBT-D19(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB3

TGBT-D20(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB2

D21-TGBT(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: T1

D7-D21(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Fault bus: D13

From-To (Circuit)	Pha	I(p)	1/2cycles		3cycles			5cycles			Steady State				
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R
Name: W14															
D6-D7(0)	A	7	3.05	3	1	3									
	B	7	3.05	3	1	3									
	C	7	3.05	3	1	3									

Name: CB1

D8-D6(0)	A	7	3.05	3	1	3
	B	7	3.05	3	1	3
	C	7	3.05	3	1	3

Name: W13

PRAC-D8(0)	A	7	3.05	3	1	3
	B	7	3.05	3	1	3
	C	7	3.05	3	1	3

Name: CB14

Taller-D9(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB13

Taller-D10(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB12

Taller-D11(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB11

Taller-D12(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB10

Taller-D13(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB9

Taller-D14(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB8

Taller-D15(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB7

Taller-D16(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB6

Taller-D17(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: W3

D18-Taller(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB5

TGBT-D18(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB4

TGBT-D19(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB3

TGBT-D20(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB2

D21-TGBT(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: T1

D7-D21(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Fault bus: D12

From-To (Circuit)	Pha I(p)		1/2cycles		3cycles			5cycles			Steady State				
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R
Name: W14															
D6-D7(0)	A	7	3.05	3	1	3									
	B	7	3.05	3	1	3									
	C	7	3.05	3	1	3									
Name: CB1															
D8-D6(0)	A	7	3.05	3	1	3									
	B	7	3.05	3	1	3									
	C	7	3.05	3	1	3									
Name: W13															
PRAC-D8(0)	A	7	3.05	3	1	3									
	B	7	3.05	3	1	3									
	C	7	3.05	3	1	3									

Name: CB14

Taller-D9(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB13

Taller-D10(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB12

Taller-D11(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB11

Taller-D12(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB10

Taller-D13(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB9

Taller-D14(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB8

Taller-D15(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB7

Taller-D16(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB6

Taller-D17(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: W3

D18-Taller(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB5

TGBT-D18(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB4

TGBT-D19(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB3

TGBT-D20(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB2

D21-TGBT(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: T1

D7-D21(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Fault bus: D11

From-To (Circuit)	Pha I(p)		1/2cycles			3cycles			5cycles			Steady State				
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(steady)
Name: W14																
D6-D7(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: CB1																
D8-D6(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: W13																
PRAC-D8(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: CB14																
Taller-D9(0)	A	0	0.00	0	0	0										
	B	0	0.00	0	0	0										
	C	0	0.00	0	0	0										
Name: CB13																
Taller-D10(0)	A	0	0.00	0	0	0										
	B	0	0.00	0	0	0										
	C	0	0.00	0	0	0										

Name: CB12

Taller-D11(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB11

Taller-D12(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB10

Taller-D13(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB9

Taller-D14(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB8

Taller-D15(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB7

Taller-D16(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB6

Taller-D17(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: W3

D18-Taller(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB5

TGBT-D18(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB4

TGBT-D19(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB3

TGBT-D20(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB2

D21-TGBT(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: T1

D7-D21(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Fault bus: D10

From-To (Circuit)	Pha	I(p)	1/2cycles		3cycles			5cycles			Steady State		
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(steady)

Name: W14

D6-D7(0)	A	7	3.05	3	1	3
	B	7	3.05	3	1	3
	C	7	3.05	3	1	3

Name: CB1

D8-D6(0)	A	7	3.05	3	1	3
	B	7	3.05	3	1	3
	C	7	3.05	3	1	3

Name: W13

PRAC-D8(0)	A	7	3.05	3	1	3
	B	7	3.05	3	1	3
	C	7	3.05	3	1	3

Name: CB14

Taller-D9(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB13

Taller-D10(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB12

Taller-D11(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB11

Taller-D12(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB10

Taller-D13(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB9

Taller-D14(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB8

Taller-D15(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB7

Taller-D16(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB6

Taller-D17(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: W3

D18-Taller(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB5

TGBT-D18(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB4

TGBT-D19(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB3

TGBT-D20(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB2

D21-TGBT(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: T1

D7-D21(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Fault bus: PRAC

From-To (Circuit)	Pha I(p)		1/2cycles			3cycles			5cycles			Steady State				
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(steady)
Name: W14																
D6-D7(0)	A	0	0.00	0	0	0										
	B	0	0.00	0	0	0										
	C	0	0.00	0	0	0										
Name: CB1																
D8-D6(0)	A	0	0.00	0	0	0										
	B	0	0.00	0	0	0										
	C	0	0.00	0	0	0										

Name: W13

PRAC-D8(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB14

Taller-D9(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB13

Taller-D10(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB12

Taller-D11(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB11

Taller-D12(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB10

Taller-D13(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB9

Taller-D14(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB8

Taller-D15(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB7

Taller-D16(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB6

Taller-D17(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: W3

D18-Taller(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB5

TGBT-D18(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB4

TGBT-D19(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB3

TGBT-D20(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB2

D21-TGBT(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: T1

D7-D21(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Fault bus: TGBT

From-To (Circuit)	Pha I(p)		1/2cycles		3cycles			5cycles			Steady State					
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(steady)
Name: W14																
D6-D7(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: CB1																
D8-D6(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: W13																
PRAC-D8(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: CB14																
Taller-D9(0)	A	0	0.00	0	0	0										
	B	0	0.00	0	0	0										
	C	0	0.00	0	0	0										

Name: CB13

Taller-D10(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB12

Taller-D11(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB11

Taller-D12(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB10

Taller-D13(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB9

Taller-D14(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB8

Taller-D15(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB7

Taller-D16(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB6

Taller-D17(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: W3

D18-Taller(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB5

TGBT-D18(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB4

TGBT-D19(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB3

TGBT-D20(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB2

D21-TGBT(0)	A	426	3.05	189	95	212
	B	426	3.05	189	95	212
	C	426	3.05	189	95	212

Name: T1

D7-D21(0)	A	426	3.05	189	95	212
	B	426	3.05	189	95	212
	C	426	3.05	189	95	212

Fault bus: Taller

From-To (Circuit)	Pha I(p)		1/2cycles			3cycles			5cycles			Steady State				
			X/R	I"(k)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(break)	I(dc)	I(asym)	X/R	I(steady)
Name: W14																
D6-D7(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: CB1																
D8-D6(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: W13																
PRAC-D8(0)	A	7	3.05	3	1	3										
	B	7	3.05	3	1	3										
	C	7	3.05	3	1	3										
Name: CB14																
Taller-D9(0)	A	0	0.00	0	0	0										
	B	0	0.00	0	0	0										
	C	0	0.00	0	0	0										
Name: CB13																
Taller-D10(0)	A	0	0.00	0	0	0										
	B	0	0.00	0	0	0										
	C	0	0.00	0	0	0										
Name: CB12																
Taller-D11(0)	A	0	0.00	0	0	0										
	B	0	0.00	0	0	0										
	C	0	0.00	0	0	0										

Name: CB11

Taller-D12(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB10

Taller-D13(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB9

Taller-D14(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB8

Taller-D15(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB7

Taller-D16(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB6

Taller-D17(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: W3

D18-Taller(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB5

TGBT-D18(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: CB4

TGBT-D19(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB3

TGBT-D20(0)	A	0	0.00	0	0	0
	B	0	0.00	0	0	0
	C	0	0.00	0	0	0

Name: CB2

D21-TGBT(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211

Name: T1

D7-D21(0)	A	425	3.05	188	95	211
	B	425	3.05	188	95	211
	C	425	3.05	188	95	211