



Anexo III-12 Modelos Dinámicos

La Presente hoja de cálculo presenta los diferentes modelos dinámicos de Generadores, Gobernadores, Estabilizadores, Relevadores, Modelo de Máquina Eólica y de SVC utilizados por ETESA en su Base de Datos.

[Modelo de Generadores](#)

[Modelo de Gobernadores](#)

[Modelo de Excitadores](#)

[Modelo de Estabilizadores](#)

[Modelo de Relevadores](#)

[Modelo de Máquina Eólica](#)

[Modelo de SVC](#)

[MODELOS DE GENERADORES](#)

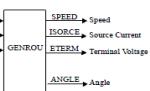
Interpretación:

IBUS	GENROU'	I	T'do	T''do	T'qo	T''qo	H	D	Xd	Xq	X'd	X'q	X''d	Xl	S(1.0)	S(1.2)
6072	'GENROU'	V3	5.1	0.02	0.7	0.1	4.45	0	1.41	1.35	0.156	0.6	0.12	0.06	0.1	0.5/

E.14 GENROU

Round Rotor Generator Model (Quadratic Saturation)

This model is located at system bus # IBUS.
 machine # I, Pm PMECH
 This model uses CONs starting with # J, Efd EFD
 and STATES starting with # K, Vt VOLT st
 The machine MVA is _____ for each of units = _____ MBASE.
 ZSOURCE for this machine is _____ + j _____ on the above MBASE



CONs	#	Value	Description
J		Td0 (=0) (sec)	
J+1		T''d0 (=0) (sec)	
J+2		Tq0 (=0) (sec)	
J+3		T''q0 (=0) (sec)	
J+4		Inertia, H	
J+5		Speed damping, D	
J+6		Xd	
J+7		Xq	
J+8		X'd	
J+9		X'q	
J+10		X''d = X''q	
J+11		Xl	
J+12		S(1.0)	
J+13		S(1.2)	

Note: Xd, Xq, X'd, X'q, Xl, H, and D are in pu, machine MVA base.

X''q must be equal to X''d.

STATES	#	Description
K		Eq
K+1		E'd
K+2		vkd
K+3		v'q
K+4		Δ speed (pu)
K+5		Angle (radians)

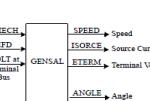
IBUS, 'GENROU', I, T'do, T''do, Tq0, T''q0, H, D, Xd, Xq, X'd, X'q, Xl, S(1.0), S(1.2)/

IBUS	GENSAL'	I	T'do	T''do	Tq0	T''q0	H	D	Xd	Xq	X'd	X'q	Xl	S(1.0)	S(1.2)
6127	'GENSAL'	G6	5.3	0.038	0.149	0.971	0	1.53	0.83	0.332	0.223	0.14	0.1	0.5/	

E.16 GENSAL

Salient Pole Generator Model (Quadratic Saturation on d-Axis)

This model is located at system bus # IBUS.
 machine # I, Pm PMECH
 This model uses CONs starting with # J, Efd EFD
 and STATES starting with # K, Vt VOLT st
 The machine MVA is _____ for each of units = _____ MBASE.
 ZSOURCE for this machine is _____ + j _____ on the above MBASE.



CONs	#	Value	Description
J		Td0 (=0) (sec)	
J+1		T''d0 (=0) (sec)	
J+2		Tq0 (=0) (sec)	
J+3		Inertia, H	
J+4		Speed damping, D	
J+5		Xd	
J+6		Xq	
J+7		X'd	
J+8		X''d = X''q	
J+9		Xl	
J+10		S(1.0)	
J+11		S(1.2)	

Note: Xd, Xq, X'd, X'q, Xl, H, and D are in pu, machine MVA base.

X''q must be equal to X''d.

STATES	#	Description
K		Eq
K+1		vkd
K+2		v'q
K+3		Δ speed (pu)
K+4		Angle (radians)

IBUS, 'GENSAL', I, T'do, T''do, Tq0, T''q0, H, D, Xd, Xq, X'd, X'q, Xl, S(1.0), S(1.2)/

Información de Base de Datos:

6071	'GENROU' V2	5.1	2.00E-02	0.7	0.1
		4.45	0	1.41	1.35
		0.6	0.12	6.00E-02	0.1
6072	'GENROU' V3	5.1	2.00E-02	0.7	0.1
		4.45	0	1.41	1.35
		0.6	0.12	6.00E-02	0.1
6073	'GENROU' V4	5.1	2.00E-02	0.7	0.1
		4.45	0	1.41	1.35
		0.6	0.12	6.00E-02	0.1
6075	'GENROU' J5	8	5.00E-02	0.7	0.1
		1.45	0	2.01	1.3
		0.6	0.116	6.00E-02	0.1
6076	'GENROU' J6	8	5.00E-02	0.7	0.1
		1.45	0	2.01	1.3
		0.6	0.116	6.00E-02	0.1
6077	'GENROU' T8	5.936	2.20E-02	0.541	4.50E-02
		1.45	0	2.078	1.931
		0.377	0.129	0.162	0.1
6078	'GENROU' V9	6.5	2.30E-02	0.7	0.1
		1.887	0	1.72	1.61
		0.6	0.16	0.145	0.1
6090	'GENSAL' E1	7	6.00E-02	9.00E-02	2.44
		1	1.09	0.62	0.2
		0.1	0.1	0.50000	/
6091	'GENSAL' E2	7	6.00E-02	9.00E-02	2.44
		1	1.09	0.62	0.2
		0.1	0.1	0.50000	/
6094	'GENSAL' L1	7	6.00E-02	9.00E-02	2.44
		1	1.09	0.62	0.2
		0.1	0.1	0.50000	/
6095	'GENSAL' L2	7	6.00E-02	9.00E-02	2.44

		1	1.09	0.62	0.2	0.11
		0.1	0.1	0.50000 /		
6097	'GENSAL' F1	9	6.00E-02	9.00E-02	4.5	
		1	1.02	0.54	0.3	0.155
		0.12	0.2	0.67000 /		
6098	'GENSAL' F2	9	6.00E-02	9.00E-02	4.5	
		1	1.02	0.54	0.3	0.155
		0.12	0.2	0.67000 /		
6099	'GENSAL' F3	9	6.00E-02	9.00E-02	4.5	
		1	1.02	0.54	0.3	0.155
		0.12	0.2	0.67000 /		
6101	'GENSAL' B1	4	2.00E-02	2.00E-02	2.69	
		1	0.99	0.833	0.3452	0.26
		0.16	0.19	0.34300 /		
6102	'GENSAL' B2	4	2.00E-02	2.00E-02	2.69	
		1	0.99	0.833	0.3452	0.26
		0.16	0.19	0.34300 /		
6106	'GENSAL' M1	4.6	3.50E-02	3.10E-02	0.93	
		0	1.46	0.8	0.334	0.2576
		0.157	0.1	0.50000 /		
6106	'GENSAL' M2	4.6	3.50E-02	3.10E-02	0.93	
		0	1.46	0.8	0.334	0.2576
		0.157	0.1	0.50000 /		
6106	'GENSAL' M3	4.6	3.50E-02	3.10E-02	0.93	
		0	1.46	0.8	0.334	0.2576
		0.157	0.1	0.50000 /		
6107	'GENSAL' M4	4.6	3.50E-02	3.10E-02	0.93	
		0	1.46	0.8	0.334	0.2576
		0.157	0.1	0.50000 /		
6107	'GENSAL' M5	4.6	3.50E-02	3.10E-02	0.93	
		0	1.46	0.8	0.334	0.2576
		0.157	0.1	0.50000 /		
6107	'GENSAL' M6	4.6	3.50E-02	3.10E-02	0.93	
		0	1.46	0.8	0.334	0.2576
		0.157	0.1	0.50000 /		
6110	'GENSAL' B3	5	7.00E-02	8.00E-02	2.96	
		1	0.9	0.57	0.4	0.24
		0.1	0.92	1.0100 /		
6121	'GENROU' G9	1.623	3.90E-02	0.139	4.30E-02	
		4.767	0	1.264	0.791	0.354
		0.303	0.268	0.206	0.95	1.0800 /
6122	'GENROU' G1	1.623	3.90E-02	0.139	4.30E-02	
		4.767	0	1.264	0.791	0.354
		0.303	0.268	0.206	0.95	1.0800 /
6127	'GENSAL' G6	5.3	3.80E-02	0.149	0.971	
		0	1.53	0.83	0.332	0.223
		0.14	0.1	0.50000 /		
6130	'GENROU' G5	5	5.00E-02	0.7	0.1	
		1.45	0	1.8	1.8	0.2
		0.2	0.15	6.80E-02	0.1	0.50000 /
6134	'GENSAL' G1	5	2.00E-02	9.00E-02	1.398	
		1	1.09	0.84	0.47	0.36
		0.14	0.19	0.59000 /		
6135	'GENSAL' G2	5	2.00E-02	9.00E-02	1.398	
		1	1.09	0.84	0.47	0.36
		0.14	0.19	0.59000 /		
6136	'GENSAL' G3	5	2.00E-02	9.00E-02	1.398	
		1	1.09	0.84	0.47	0.36
		0.14	0.19	0.59000 /		
6140	'GENSAL' G1	5	2.00E-02	9.00E-02	2.233	
		1	1.01	0.63	0.33	0.33
		0.12	0.19	0.59000 /		
6140	'GENSAL' G2	5	2.00E-02	9.00E-02	2.233	
		1	1.01	0.63	0.33	0.33
		0.12	0.19	0.59000 /		
6140	'GENSAL' G3	5	2.00E-02	9.00E-02	2.233	
		1	1.01	0.63	0.33	0.33
		0.12	0.19	0.59000 /		
6140	'GENSAL' G5	5	2.00E-02	9.00E-02	2.233	
		1	1.01	0.63	0.33	0.33
		0.12	0.19	0.59000 /		
6140	'GENSAL' G6	5	2.00E-02	9.00E-02	2.233	
		1	1.01	0.63	0.33	0.33
		0.12	0.19	0.59000 /		
6140	'GENSAL' G4	5	2.00E-02	9.00E-02	2.21	
		1	1.01	0.78	0.38	0.38
		0.12	0.19	0.59000 /		
6140	'GENSAL' G5	5	2.00E-02	9.00E-02	1.991	
		1	1.1	0.78	0.38	0.38
		0.12	0.19	0.59000 /		
6140	'GENSAL' G6	5	2.00E-02	9.00E-02	1.991	
		1	1.1	0.78	0.38	0.38
		0.12	0.19	0.59000 /		
6155	'GENSAL' G7	6.428	4.24E-02	0.1555	0.83	
		0	1.533	0.845	0.325	0.179
		0.268	1.156	1.8220 /		
6155	'GENSAL' G8	6.428	4.24E-02	0.1555	0.83	
		0	1.533	0.845	0.325	0.179
		0.268	1.156	1.8220 /		
6172	'GENSAL' P1	5.3	3.80E-02	0.149	0.971	
		0	1.53	0.83	0.332	0.223
		0.14	0.1	0.50000 /		
6172	'GENSAL' P2	5.3	3.80E-02	0.149	0.781	
		0	1.53	0.83	0.332	0.223
		0.14	0.1	0.50000 /		
6172	'GENSAL' P3	5.3	3.80E-02	0.149	0.971	
		0	1.53	0.83	0.332	0.223
		0.14	0.1	0.50000 /		
6176	'GENSAL' E1	5.65	8.00E-02	0.16	3.18	
		1	1.05	0.73	0.37	0.3
		0.21	1.05	1.5000 /		
6177	'GENSAL' E2	5.65	8.00E-02	0.16	3.18	
		1	1.05	0.73	0.37	0.3
		0.21	1.05	1.5000 /		
6264	'GENSAL' G1	9	6.00E-02	9.00E-02	4.5	
		1	1.02	0.54	0.3	0.2
		0.12	0.2	0.67000 /		
6265	'GENSAL' G2	9	6.00E-02	9.00E-02	4.5	
		1	1.02	0.54	0.3	0.2
		0.12	0.2	0.67000 /		
6268	'GENSAL' G3	5	2.00E-02	9.00E-02	1.398	
		1	1.09	0.84	0.47	0.36
		0.14	0.19	0.59000 /		
6271	'GENSAL' G1	6.2	2.90E-02	0.12	0.82	
		0	1.52	0.768	0.257	0.156
		0.122	0.1	0.50000 /		
6271	'GENSAL' G2	6.2	2.90E-02	0.12	0.82	
		0	1.52	0.768	0.257	0.156
		0.122	0.1	0.50000 /		
6271	'GENSAL' G3	6.2	2.90E-02	0.12	0.82	
		0	1.52	0.768	0.257	0.156
		0.122	0.1	0.50000 /		
6271	'GENSAL' G4	6.2	2.90E-02	0.12	0.82	

		0	1.52	0.768	0.257	0.156
6271	'GENSAL' G5	0.122	0.1	0.50000 /		
		0	1.52	0.768	0.257	0.156
6272	'GENSAL' G0	0.122	0.1	0.50000 /		
		0	1.52	0.768	0.257	0.156
6272	'GENSAL' G6	0.122	0.1	0.50000 /		
		0	1.52	0.768	0.257	0.156
6272	'GENSAL' G7	0.122	0.1	0.50000 /		
		0	1.52	0.768	0.257	0.156
6272	'GENSAL' G8	0.122	0.1	0.50000 /		
		0	1.52	0.768	0.257	0.156
6272	'GENSAL' G9	0.122	0.1	0.50000 /		
		0	1.52	0.768	0.257	0.156
6281	'GENSAL' G1	2.06	2.03E-02	1.70E-02	0.93	
		0	1.53	1.49	0.31	0.22
6281	'GENSAL' G2	0.157	0.1	0.50000 /		
		0	1.53	1.49	0.31	0.22
6281	'GENSAL' G3	0.157	0.1	0.50000 /		
		0	1.53	1.49	0.31	0.22
6281	'GENSAL' G4	0.157	0.1	0.50000 /		
		0	1.53	1.49	0.31	0.22
6282	'GENSAL' G5	0.157	0.1	0.50000 /		
		0	1.53	1.49	0.31	0.22
6282	'GENSAL' G6	0.157	0.1	0.50000 /		
		0	1.53	1.49	0.31	0.22
6282	'GENSAL' G7	0.157	0.1	0.50000 /		
		0	1.53	1.49	0.31	0.22
6282	'GENSAL' G8	0.157	0.1	0.50000 /		
		0	1.53	1.49	0.31	0.22
6291	'GENROU' G1	6.566	2.30E-02	0.487	4.90E-02	
		7.8	0	2.06	1.964	0.271
6292	'GENROU' G2	0.42	0.178	0.148	0.1	0.50000 /
		0.29	0.11	0.1	0.1	0.40000 /
6311	'GENROU' A1	3.839	3.20E-02	0.328	7.70E-02	
		8.1	0	1.87	1.802	0.259
6311	'GENROU' A2	0.596	0.24	0.197	0.1	0.50000 /
		2.01	0	1.31	1.802	0.13
6321	'GENROU' M1	1.3778	2.25E-02	0.75	2.25E-02	
		0.53	0	1.01	1.09	0.29
6321	'GENROU' M2	0.29	0.16	0.255	0.1	0.40000 /
		0.62	0.11	0.1	0.1	0.40000 /
6321	'GENROU' G3	0.53	0	1.01	1.09	0.29
		0.29	0.16	0.255	0.1	0.40000 /
6333	'GENSAL' G1	7	6.00E-02	9.00E-02	2.44	
		1	1.09	0.62	0.2	0.3
6334	'GENSAL' G2	0.1	0.1	0.50000 /		
		7	6.00E-02	9.00E-02	2.44	
6335	'GENSAL' G1	0.1	0.1	0.50000 /		
		7	6.00E-02	0.1	2.44	
6336	'GENSAL' G2	0.1	0.1	0.48000 /		
		1	1.09	0.62	0.3	0.3
6361	'GENSAL' G1	0.1	0.11	0.48000 /		
		7	6.00E-02	9.00E-02	3.5	
6362	'GENSAL' G2	0.13	0.1	0.50000 /		
		1	1.09	0.62	0.19	0.3
6364	'GENSAL' G1	0.13	0.1	0.50000 /		
		7	6.00E-02	9.00E-02	3.5	
6365	'GENSAL' G2	0.13	0.1	0.50000 /		
		1	1.09	0.62	0.19	0.3
6367	'GENSAL' G1	0.13	0.1	0.50000 /		
		7	6.00E-02	9.00E-02	3.5	
6368	'GENSAL' G2	0.13	0.1	0.50000 /		
		1	1.09	0.62	0.19	0.3
6371	'GENROU' G1	0.13	0.1	0.50000 /		
		8	7.50E-02	1.5	0.2	
6372	'GENROU' G2	0.35	0.2	0.1	0.1	0.50000 /
		5	0	2	1.9	0.35
6384	'GENSAL' G1	0.35	0.2	0.1	0.1	0.50000 /
		3.8412	3.38E-02	0.1598	2.44	
		1	1.375	0.828	0.331	0.174
6384	'GENSAL' G2	0.1	0.1	0.50000 /		
		3.8412	3.38E-02	0.1598	2.44	
6385	'GENSAL' G1	0.1	0.1	0.50000 /		
		1	1.375	0.828	0.331	0.174
6385	'GENSAL' G2	0.1	0.1	0.50000 /		
		3.5476	2.57E-02	0.1087	2.44	
6385	'GENSAL' G1	0.1	0.1	0.50000 /		
		1	1.283	0.739	0.274	0.182
6391	'GENSAL' G2	0.1	0.1	0.50000 /		
		3.42	1.30E-02	2.20E-02	2.55	
6391	'GENSAL' G1	2.30E-02	1.056	1.3930	/	0.178
		3.42	1.30E-02	2.20E-02	2.55	

	0.161	1.557	0.936	0.294	0.178
	2.30E-02	1.056	1.3930	/	
6413	'GENROU' G1	8	7.50E-02	1.5	0.2
	5	0	2	1.9	0.35
	0.35	0.2	0.1	0.1	0.50000 /
6414	'GENROU' G2	8	7.50E-02	1.5	0.2
	5	0	2	1.9	0.35
	0.35	0.2	0.1	0.1	0.50000 /
6416	'GENROU' G1	9	3.20E-02	0.328	7.70E-02
	2.01	0	1.31	1.802	0.13
	0.596	0.1	0.1	0.1	0.50000 /
6417	'GENROU' G2	9	3.20E-02	0.328	7.70E-02
	2.01	0	1.31	1.802	0.13
	0.596	0.1	0.1	0.1	0.50000 /
6418	'GENROU' V3	6.5	2.30E-02	0.7	0.1
	1.887	0	1.72	1.61	0.2
	0.6	0.16	0.145	0.1	0.40000 /
6421	'GENROU' G1	9	3.20E-02	0.328	7.70E-02
	2.01	0	1.31	1.802	0.13
	0.596	0.1	0.1	0.1	0.50000 /
6422	'GENROU' G2	9	3.20E-02	0.328	7.70E-02
	2.01	0	1.31	1.802	0.13
	0.596	0.1	0.1	0.1	0.50000 /
6423	'GENROU' V3	6.5	2.30E-02	0.7	0.1
	1.887	0	1.72	1.61	0.2
	0.6	0.16	0.145	0.1	0.40000 /
6426	'GENROU' G1	9	3.20E-02	0.328	7.70E-02
	2.01	0	1.31	1.802	0.13
	0.596	0.1	0.1	0.1	0.50000 /
6427	'GENROU' G2	9	3.20E-02	0.328	7.70E-02
	2.01	0	1.31	1.802	0.13
	0.596	0.1	0.1	0.1	0.50000 /
6428	'GENROU' V3	6.5	2.30E-02	0.7	0.1
	1.887	0	1.72	1.61	0.2
	0.6	0.16	0.145	0.1	0.40000 /
6452	'GENSAL' G1	3.841	3.40E-02	0.16	2.44
	1	1.375	0.828	0.331	0.174
	0.1	0.1	0.50000 /		
6452	'GENSAL' G2	3.841	3.40E-02	0.16	2.44
	1	1.375	0.828	0.331	0.174
	0.1	0.1	0.50000 /		
6454	'GENSAL' G1	7	6.00E-02	9.00E-02	2.44
	1	1.3	0.94	0.51	0.3
	0.39	0.1	0.50000 /		
6456	'GENSAL' G1	3.841	3.40E-02	0.16	2.44
	1	1.375	0.828	0.331	0.174
	0.1	0.1	0.50000 /		
6456	'GENSAL' G2	3.841	3.40E-02	0.16	2.44
	1	1.375	0.828	0.331	0.174
	0.1	0.1	0.50000 /		
6461	'GENSAL' G1	9	6.00E-02	9.00E-02	4.5
	1	1.02	0.54	0.3	0.2
	0.12	0.2	0.67000 /		
6462	'GENSAL' G2	9	6.00E-02	9.00E-02	4.5
	1	1.02	0.54	0.3	0.2
	0.12	0.2	0.67000 /		
6510	'GENSAL' G1	5	2.00E-02	9.00E-02	2.233
	1	1.01	0.63	0.33	0.33
	0.12	0.19	0.59000 /		
6511	'GENSAL' G2	5	2.00E-02	9.00E-02	2.233
	1	1.01	0.63	0.33	0.33
	0.12	0.19	0.59000 /		
6520	'GENSAL' G1	5	2.00E-02	9.00E-02	2.233
	1	1.01	0.63	0.33	0.33
	0.12	0.19	0.59000 /		
6521	'GENSAL' G2	5	2.00E-02	9.00E-02	2.233
	1	1.01	0.63	0.33	0.33
	0.12	0.19	0.59000 /		
6530	'GENROU' G1	1.3778	2.25E-02	0.75	2.25E-02
	0.53	0	1.01	1.09	0.29
	0.29	0.16	0.255	0.1	0.40000 /
6530	'GENROU' G2	1.3778	2.25E-02	0.75	2.25E-02
	0.53	0	1.01	1.09	0.29
	0.29	0.16	0.255	0.1	0.40000 /
6560	'GENSAL' G1	7	6.00E-02	9.00E-02	2.44
	1	1.09	0.62	0.2	0.38
	0.1	0.1	0.50000 /		
6570	'GENSAL' G1	3.5476	2.57E-02	0.1087	2.44
	1	1.283	0.739	0.274	0.182
	0.1	0.1	0.50000 /		
6570	'GENSAL' G2	3.5476	2.57E-02	0.1087	2.44
	1	1.283	0.739	0.274	0.182
	0.1	0.1	0.50000 /		
6600	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55
	0.161	1.557	0.936	0.294	0.178
	2.30E-02	1.056	1.3930	/	
6621	'GENSAL' G2	3.42	1.30E-02	2.20E-02	2.55
	0.161	1.557	0.936	0.294	0.16
	2.30E-02	1.056	1.3930	/	
6623	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55
	0.161	1.557	0.936	0.294	0.16
	2.30E-02	1.056	1.3930	/	
6631	'GENSAL' G1	4.9312	4.89E-02	4.08E-02	1.124
	1	1.574	0.938	0.269	0.217
	0.907	0.1	0.50000 /		
6631	'GENSAL' G2	4.9312	4.89E-02	4.08E-02	1.124
	1	1.574	0.938	0.269	0.217
	0.907	0.1	0.50000 /		
6641	'GENSAL' G1	4.9312	3.91E-02	4.08E-02	1.124
	0	1.481	0.884	0.263	0.202
	9.07E-02	0.1	0.50000 /		
6641	'GENSAL' G2	4.9312	3.91E-02	4.08E-02	1.124
	0	1.481	0.884	0.263	0.202
	9.07E-02	0.1	0.50000 /		
6651	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55
	0.161	1.557	0.936	0.294	0.178
	2.30E-02	1.056	1.3930	/	
6661	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55

		0.161	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6671	'GENSAL' G1	7	6.00E-02	9.00E-02	2.44	
		1	1.09	0.62	0.2	0.11
		0.1	0.1	0.50000	/	
6672	'GENSAL' G2	7	6.00E-02	9.00E-02	2.44	
		1	1.09	0.62	0.2	0.11
		0.1	0.1	0.50000	/	
6682	'GENSAL' G1	7	6.00E-02	9.00E-02	2.44	
		1	1.3	0.94	0.51	0.3
		0.39	0.1	0.50000	/	
6682	'GENSAL' G2	7	6.00E-02	9.00E-02	2.44	
		1	1.3	0.94	0.51	0.3
		0.39	0.1	0.50000	/	
6682	'GENSAL' G3	7	6.00E-02	9.00E-02	2.44	
		1	1.09	0.62	0.2	0.38
		0.1	0.1	0.50000	/	
6684	'GENSAL' G1	7	6.00E-02	9.00E-02	2.44	
		1	1.3	0.94	0.51	0.3
		0.39	0.1	0.50000	/	
6684	'GENSAL' G2	7	6.00E-02	9.00E-02	2.44	
		1	1.3	0.94	0.51	0.3
		0.39	0.1	0.50000	/	
6692	'GENSAL' G1	4.32	8.00E-02	0.22	2.5	
		1	1.25	0.76	0.31	0.24
		0.2	0.80000E-03	0.48000	/	
6693	'GENSAL' G2	4.32	8.00E-02	0.22	2.5	
		1	1.25	0.76	0.31	0.24
		0.2	0.80000E-01	0.48000	/	
6694	'GENSAL' G3	4.32	8.00E-02	0.22	2.5	
		1	1.25	0.76	0.31	0.24
		0.2	0.80000E-01	0.48000	/	
6696	'GENSAL' G1	4.66	3.87E-02	9.00E-02	1.7	
		1	1.74	1.046	0.425	0.204
		0.18	0.1	0.50000	/	
6697	'GENSAL' G2	4.66	3.87E-02	9.00E-02	1.7	
		1	1.74	1.046	0.425	0.204
		0.18	0.1	0.50000	/	
6699	'GENSAL' G1	4.66	3.87E-02	9.00E-02	1.7	
		1	1.74	1.046	0.425	0.204
		0.18	0.1	0.50000	/	
6700	'GENSAL' G2	4.66	3.87E-02	9.00E-02	1.7	
		1	1.74	1.046	0.425	0.204
		0.18	0.1	0.50000	/	
6701	'GENSAL' G3	4.66	3.87E-02	9.00E-02	1.7	
		1	1.74	1.046	0.425	0.204
		0.18	0.1	0.50000	/	
6711	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	
		0.161	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6721	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	
		0.161	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6731	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	
		0.161	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6731	'GENSAL' G2	3.42	1.30E-02	2.20E-02	2.55	
		0.161	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6736	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	
		0.16	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6736	'GENSAL' G2	3.42	1.30E-02	2.20E-02	2.55	
		0.16	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6741	'GENSAL' G1	3.8412	3.38E-02	0.1598	2.44	
		1	1.375	0.828	0.331	0.174
		0.1	0.1	0.50000	/	
6741	'GENSAL' G2	3.8412	3.38E-02	0.1598	2.44	
		1	1.375	0.828	0.331	0.174
		0.1	0.1	0.50000	/	
6750	'GENSAL' G1	7	6.00E-02	9.00E-02	2.44	
		1	1.09	0.62	0.2	0.3
		0.1	0.1	0.50000	/	
6750	'GENSAL' G2	7	6.00E-02	9.00E-02	2.44	
		1	1.09	0.62	0.2	0.3
		0.1	0.1	0.50000	/	
6750	'GENSAL' G3	7	6.00E-02	9.00E-02	2.44	
		1	1.09	0.62	0.2	0.3
		0.1	0.1	0.50000	/	
6764	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	
		0.16	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6764	'GENSAL' G2	3.42	1.30E-02	2.20E-02	2.55	
		0.16	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6766	'GENSAL' G1	3.841	3.40E-02	0.16	2.44	
		1	1.375	0.828	0.331	0.174
		0.1	0.1	0.50000	/	
6766	'GENSAL' G2	3.841	3.40E-02	0.16	2.44	
		1	1.375	0.828	0.331	0.174
		0.1	0.1	0.50000	/	
6769	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	
		0.16	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6769	'GENSAL' G2	3.42	1.30E-02	2.20E-02	2.55	
		0.16	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6772	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	
		0.16	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6774	'GENSAL' G1	4.931	4.90E-02	4.10E-02	1.12	
		1	1.574	0.938	0.269	0.217
		0.907	0.1	0.50000	/	
6774	'GENSAL' G2	4.931	4.90E-02	4.10E-02	1.12	
		1	1.574	0.938	0.269	0.217
		0.907	0.1	0.50000	/	
6778	'GENSAL' G1	7	6.00E-02	9.00E-02	2.44	
		1	1.09	0.62	0.2	0.38
		0.1	0.1	0.50000	/	
6781	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	

		0.16	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6781	'GENSAL' G2	3.42	1.30E-02	2.20E-02	2.55	
		0.16	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6783	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	
		0.16	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6783	'GENSAL' G2	3.42	1.30E-02	2.20E-02	2.55	
		0.16	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6784	'GENSAL' G1	3.841	3.40E-02	0.16	2.44	
		1	1.375	0.828	0.331	0.174
		0.1	0.1	0.50000	/	
6785	'GENSAL' G2	3.841	3.40E-02	0.16	2.44	
		1	1.375	0.828	0.331	0.174
		0.1	0.1	0.50000	/	
6791	'GENSAL' G1	7	6.00E-02	9.00E-02	3.5	
		1	1.09	0.62	0.19	0.3
		0.13	0.1	0.50000	/	
6792	'GENSAL' G2	7	6.00E-02	9.00E-02	3.5	
		1	1.09	0.62	0.19	0.3
		0.13	0.1	0.50000	/	
6801	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	
		0.161	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6801	'GENSAL' G2	3.42	1.30E-02	2.20E-02	2.55	
		0.161	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6821	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	
		0.161	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6821	'GENSAL' G2	3.42	1.30E-02	2.20E-02	2.55	
		0.161	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6831	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	
		0.161	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6831	'GENSAL' G2	3.42	1.30E-02	2.20E-02	2.55	
		0.161	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	
6841	'GENSAL' G1	7	6.00E-02	9.00E-02	2.44	
		1	1.09	0.62	0.2	0.3
		0.1	0.1	0.50000	/	
6841	'GENSAL' G2	7	6.00E-02	9.00E-02	2.44	
		1	1.09	0.62	0.2	0.3
		0.1	0.1	0.50000	/	
6851	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	
		0.161	1.557	0.936	0.294	0.16
		2.30E-02	1.056	1.3930	/	
6861	'GENSAL' G1	7	6.00E-02	9.00E-02	2.44	
		1	1.6	0.62	0.25	0.18
		0.16	0.1	0.50000	/	
6861	'GENSAL' G2	7	6.00E-02	9.00E-02	2.44	
		1	1.6	0.62	0.25	0.18
		0.16	0.1	0.50000	/	
6861	'GENSAL' G3	7	6.00E-02	9.00E-02	2.44	
		1	1.6	0.62	0.25	0.18
		0.16	0.1	0.50000	/	
6871	'GENROU' G1	7	6.00E-02	0.7	9.00E-02	
		4.88	1	1.09	0.62	0.2
		0.2	0.11	2.50E-02	0.1	0.50000
6871	'GENROU' G2	7	6.00E-02	0.7	9.00E-02	
		4.88	1	1.09	0.62	0.2
		0.2	0.11	2.50E-02	0.1	0.50000
6930	'GENSAL' G1	3.5476	2.57E-02	0.1087	2.44	
		1	1.283	0.739	0.274	0.182
		0.1	0.1	0.50000	/	
6935	'GENSAL' G1	3.5476	2.57E-02	0.1087	2.44	
		1	1.283	0.739	0.274	0.182
		0.1	0.1	0.50000	/	
6940	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	
		0.161	1.557	0.936	0.294	0.16
		2.30E-02	1.056	1.3930	/	
6940	'GENSAL' G2	3.42	1.30E-02	2.20E-02	2.55	
		0.161	1.557	0.936	0.294	0.16
		2.30E-02	1.056	1.3930	/	
6951	'GENSAL' G1	3.42	1.30E-02	2.20E-02	2.55	
		0.161	1.557	0.936	0.294	0.178
		2.30E-02	1.056	1.3930	/	

MODELO DE GOBERNADORES

Interpretación:

IBUS	DEGOV1	I	Droop Control	T1	T2	T3	K	T4	T5	T6	TD	Tmax	Tmin	Droop	TE
6106	'DEGOV1'	M1	0	5	0.05	15	5.1	0.322	0	0.002	0.8	0.387	0.03	0.05/	

H.3 DEGOV1

Woodward Diesel Governor

This model is located at system bus machine
This model uses CONs starting with
and ICONs and STATES starting with
and VARs starting with

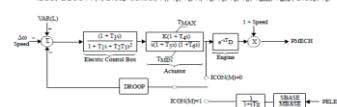


CONs #	# Value	Description	CONs #	# Value	Description
J	1 (0)		J+1	1 (0)	T_1 (sec)
J+1	T_1 (sec)		J+2	T_2 (sec)	
J+2	T_2 (sec)		J+3	K	
J+3	K		J+4	T_4 (sec)	
J+4	T_4 (sec)		J+5	ΔT (sec)	Droop
J+5	T_5 (sec)				T_g

STATES #	# Description	VALs #	# Description
K	Electric control box 1	L	Reference
K+1	Electric control box 2	L+1	
K+2	Antilure 1	-	
K+3	Antilure 2	-	
K+4	Antilure 3	-	
K+5	Power transducer	L+13	Delay table

ICONs #	# Value	Description
M	Drop control	

IBUS, 'DEGOV1', I, Droop Control, T_1 , T_2 , K, T_4 , T_5 , T_g , T_{MAX} , T_{MIN} , Droop, T_f /



IBUS	GAST	I	R	T1	T2	T3	AT	ET	NMAX	VMAX	Droop	
6075	'GAST'	J5	0.04	0.1	0.1	3	1	2	0.84	0.05	0.5/	

H.4 GAST

Gas Turbine-Governor

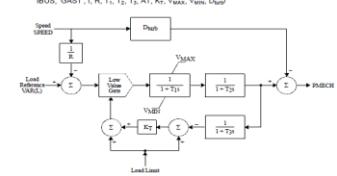
This model is located at system bus machine
This model uses CONs starting with
and STATES starting with
and VARs starting with



CONs #	# Value	Description	CONs #	# Value	Description
J	R (speed droop)	$J+5$	K_c		
J+1	T_1 (sec)	$J+6$	V_{MAX}		
J+2	T_2 (sec)	$J+7$	V_{MIN}		
J+3	T_3 (sec)	$J+8$	D_{TUR}		
J+4	T_4 (sec)	$J+9$	$D_{TUR,AT}$		

STATES #	# Description	VARs #	# Description
K	Fuel valve	L	Load reference
K+1	Fuel flow		
K+2	Exhaust temperature		

IBUS, 'GAST', I, R, T_1 , T_2 , AT, Kr, Vmax, Vmin, Dmax/



IBUS	HYGOV	I	R	r	Tr	Tf	Tg	VELM	GMAX	GMIN	TW	AT	Durb	qHC
6091	'HYGOV'	E2	0.03	1	1.6	0.025	0.2	0.167	0.88	0.05	2.52	1.05	0.5	0.08/

H.8 HYGOV

Hydro Turbine-Governor

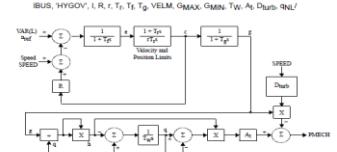
This model is located at system bus machine
This model uses CONs starting with
and STATES starting with
and VARs starting with



CONs #	# Value	Description	CONs #	# Value	Description
J	K_p (permanent drop)	$J+6$	K_m (max gate limit)		
J+1	T_{dP} (sec)	$J+7$	K_{sp} (speed limit)		
J+2	T_{dV} (sec)	$J+8$	T_{sp} (0) water time constant		
J+3	T_{dV} (sec)	$J+9$	T_{sp} (0) filter time constant		
J+4	T_d (sec)	$J+10$	A_t turbine gain		
J+5	T_d (sec)	$J+11$	D_{turb} turbine damping		
J+6	V_{ELM} (vel gate velocity limit)		Q_{no} no load flow		

STATES #	# Description	VALs #	# Description
K	filter output	L	Speed reference
K+1	desired gate	L+1	turbine head
K+2	gate opening		
K+3	Q		

IBUS, HYGOV, I, R, r, T_d , T_g , VELM, GMAX, GMIN, TW, Durb, qHC/

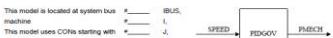


IBUS	PIDGOV	I	Feedback Signal	Roarm	Tree	Kg	Kd	Ta	Tb	Durb	G0	G1	P1	G2	P2	P3	Gmax	Gmin	Atar	Tar	Velmax	Velmin
6692	'PIDGOV'	G1	1	0.04	0	3	0.7	0	0.01	0.02	0	0.5	0.5	0.75	0.75	1	1	0	1	0.2	0.16	0.0/

H.13 PIDGOV

Hydro Turbine and Governor

This model is located at system bus machine
This model uses CONs starting with
and ICONs and STATES starting with
and VARs starting with



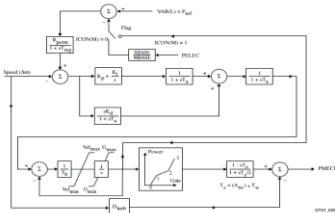
CONs #	# Value	Description
J	R_{pwm} permanent drop, pu	
J+1	T_{sp} (sec), speed detector time constant	
J+2	K_p (proportional gain, pu)	
J+3	K_d (derivative gain, pu)	
J+4	T_d (sec) > 0, controller time constant	
J+5	T_{sp} (sec) > 0, water time constant	
J+6	D_{turb} turbine damping factor, pu	
J+7	G_1 intermediate gate opening, pu	
J+8	G_2 intermediate gate opening, pu	
J+9	P_1 power at gate opening G_1 , pu	
J+10	P_2 power at gate opening G_2 , pu	
J+11	P_3 power at full opened gate, pu	

J+14		G_{max} , maximum gate opening, pu
J+15		G_{min} , minimum gate opening, pu
J+16		T_{max} , 5 times multiplying T_{reg} , pu
J+17		T_{reg} , time constant of power content
J+18		V_{max} , minimum gate opening velocity, pulse/sec
J+19		V_{min} , < 0, minimum gate closing velocity, pulse/sec

STATEs	#	Description
K		Input sensor
K+1		P/I controller
K+2		Derivative controller
K+3		Derivative controller
K+4		Second regulator
K+5		Gate position
K+6		Water meter

VALs	#	Description
L		Reference
ICONs	#	Value
M		Feedback

IBUS, "PIDGOV1", Feedback Signal, R_{set} , T_{reg} , K_p , K_d , T_d , D_{bus} , G_1 , P_1 , G_2 , P_2 , P_3 , G_{max} , A_{sw} , T_b , V_{max} , V_{min}



IBUS	TGOV1'	I	R	T1	Vmax	Vmin	T2	T3	D1
6071	"TGOV1'	V2	0.06	0.05	0.851	0	1	3	0/

H.15 TGOV1

Steam Turbine-Governor

This model is located at system bus IBUS.
This model uses CONs starting with J, L, K, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, _CON.
and STATES starting with K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, _STATE.

CONs	#	Value	Description
J		R	IBUS,
J+1		T_1 (=0) (secs)	
J+2		V_{MAX}	
J+3		V_{MIN}	
J+4		T_2 (secs)	
J+5		T_3 (secs)	
J+6		T_4 (=0) (secs)	

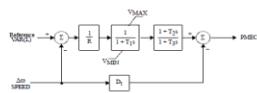
Note: V_{MAX} , V_{MIN} , D are in per unit on generator base.

T_2 , T_3 = high-pressure fraction.

T_4 = reheater time constant.

STATES	#	Description
K		Gate opening
K+1		Turbine power

IBUS, "TGOV1", I, R, T_1 , V_{MAX} , V_{MIN} , T_2 , T_3 , D /



IBUS	WPIDHY	I	R	REG	D0	K1	K2	Tb	Tb	VELMX	VELMN	GATMX	GATMN	Tsp	Pmax	D	G1	G2	G3	G4			
6530	"WPIDHY"	G1	0.01	0.05	0.1	0.05	0	0.02	0.01	0.05	-0.05	1	0.545	1.4	0.954	0.3826	0.161	0.3	0.545	0.4	0.527	0.83	1/

H.21 WPIDHY

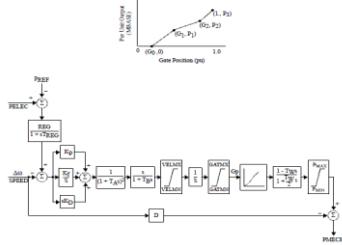
Woodward PID Hydro Governor

This model is located at system bus IBUS.
This model uses CONs starting with J, L, K, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, _CON.
and STATES starting with K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, _STATE.

CONs	#	Value	Description
J		T_{reg} (secs)	
J+1		REG	
J+2		T_{reg}	
J+3		K_p	
J+4		K_d	
J+5		T_d (=0) (secs)	
J+6		T_{reg} (=0) (secs)	
J+7		V_{MAX}	
J+8		V_{MIN} (=0)	
J+9		P_1	
J+10		$GATM$	

STATES	#	Description
K		Measured electrical power deviation
K+1		P/I controller
K+2		First lag
K+3		Second lag
K+4		Ratio
K+5		Mechanical power

IBUS, "WPIDHY", I, T_{reg} , REG, K_p , K_d , T_d , V_{MAX} , V_{MIN} , GATM, GATMN, T_{reg} , P_{max} , D , G_1 , G_2 , G_3 , G_4 , P_1 , P_2 , P_3



Información de Base de Datos:

6071	"TGOV1"	V2	6.00E-02	5.00E-02	0.851	0
6072	"TGOV1"	V3	6.00E-02	5.00E-02	0.851	0
6073	"TGOV1"	V4	6.00E-02	5.00E-02	0.851	0
6075	"GAST"	J5	4.00E-02	0.1	0.1	3
6076	"GAST"	J6	4.00E-02	0.1	0.1	3
6077	"GAST"	T8	4.00E-02	0.1	0.1	3
6078	"TGOV1"	V9	6.00E-02	5.00E-02	0.859	0
6090	"HYGOV"	E1	3.00E-02	0.88	16	2.50E-02
6091	"HYGOV"	E2	3.00E-02	1	16	2.50E-02
6094	"HYGOV"	L1	3.00E-02	1	14	2.50E-02

6095	'HYGOV'	L2	3.00E-02	0.80000E-01/	2.8
			0.5	1.01	5.00E-02
			0.167	0.80000E-01	
			0.5	1.01	5.00E-02
6097	'HYGOV'	F1	3.00E-02	0.80000E-01/	2.8
			0.5	0.80000E-01	
			0.167	0.95	5.00E-02
			0.5	0.80000E-01	
6098	'HYGOV'	F2	3.00E-02	0.5	3.00E-02
			0.5	0.5	11.8
			0.167	0.95	5.00E-02
			0.5	0.80000E-01	
6099	'HYGOV'	F3	3.00E-02	0.5	3.00E-02
			0.167	0.95	5.00E-02
			0.5	0.80000E-01	
6101	'HYGOV'	B1	3.00E-02	0.5	3.00E-02
			0.167	0.893	14.5
			0.5	0.80000E-01	
			0.167	0.893	0.266
			0.5	0.80000E-01	1.15
6102	'HYGOV'	B2	3.00E-02	0.5	3.00E-02
			0.167	0.893	0.266
			0.5	0.80000E-01/	
			0.167	0.893	1.15
6106	'DEGOV1'	M1	0	0	5.00E-02
			0.5	0.80000E-01/	
			0.167	0.322	0
			0.5	0.322	2.00E-03
6107	'DEGOV1'	M2	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6106	'DEGOV1'	M3	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6107	'DEGOV1'	M5	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6107	'DEGOV1'	M6	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6110	'HYGOV'	B3	3.00E-02	0.8	3.00E-02
			0.167	0.87	0.26
			0.5	0.80000E-01	
6121	'DEGOV1'	G9	3.00E-02	0.5	3.00E-02
			0.167	0.322	0
			0.5	0.322	2.00E-03
6122	'DEGOV1'	G1	3.00E-02	0.8	3.00E-02
			0.167	0.93	5.00E-02
			0.5	0.93	2.52
			0.167	0.80000E-01	
6127	'DEGOV1'	G6	3.00E-02	0.5	3.00E-02
			0.167	0.322	0
			0.5	0.322	2.00E-03
6136	'HYGOV'	G3	3.00E-02	0.5	3.00E-02
			0.167	0.93	5.00E-02
			0.5	0.80000E-01	
6155	'DEGOV1'	G7	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6155	'DEGOV1'	G8	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6172	'DEGOV1'	P1	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6172	'DEGOV1'	P2	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6172	'DEGOV1'	P3	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6176	'HYGOV'	E1	3.00E-02	0.8	3.00E-02
			0.167	0.87	0.4
			0.5	0.80000E-01	
6177	'HYGOV'	E2	3.00E-02	0.8	3.00E-02
			0.167	0.87	0.4
			0.5	0.80000E-01	
6264	'HYGOV'	G1	5.00E-02	0.5	10
			0.167	0.95	5.00E-02
			0.5	0.12500 /	1
6265	'HYGOV'	G2	5.00E-02	0.5	10
			0.167	0.95	5.00E-02
			0.5	0.12500 /	1
			0.167	0.95	5.00E-02
6268	'HYGOV'	G3	3.00E-02	1	2.50E-02
			0.167	0.95	5.00E-02
			0.5	0.12500 /	2.52
6271	'DEGOV1'	G1	0	0	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6271	'DEGOV1'	G2	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6271	'DEGOV1'	G3	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6271	'DEGOV1'	G4	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6271	'DEGOV1'	G5	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6272	'DEGOV1'	G6	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6272	'DEGOV1'	G7	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6272	'DEGOV1'	G8	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6272	'DEGOV1'	G9	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6281	'DEGOV1'	G1	1	5	5.00E-02
			0.167	0.322	0
			0.5	0.322	2.00E-03
6281	'DEGOV1'	G2	1	5	5.00E-02
			0.167	0.322	0
			0.5	0.322	2.00E-03
6281	'DEGOV1'	G3	1	5	5.00E-02
			0.167	0.322	0
			0.5	0.322	2.00E-03
6281	'DEGOV1'	G4	1	5	5.00E-02
			0.167	0.322	0
			0.5	0.322	2.00E-03
6282	'DEGOV1'	G5	1	5	5.00E-02
			0.167	0.322	0
			0.5	0.322	2.00E-03
6282	'DEGOV1'	G6	1	5	5.00E-02
			0.167	0.322	0
			0.5	0.322	2.00E-03
6282	'DEGOV1'	G7	1	5	5.00E-02
			0.167	0.322	0
			0.5	0.322	2.00E-03
6282	'DEGOV1'	G8	1	5	5.00E-02
			0.167	0.322	0
			0.5	0.322	2.00E-03
6291	'DEGOV1'	G1	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6292	'DEGOV1'	G2	0	5	5.00E-02
			0.5	0.322	0
			0.167	0.322	0
			0.5	0.322	2.00E-03
6293	'GAST'	G3	4.00E-02	5.00E-02	3
			0.167	1	5.00E-02
			0.5	1	5.00E-02
			0.167	0.923	5.00E-02
			0.5	0.80000E-01	
6321	'HYGOV'	M1	3.00E-02	1	2.50E-02
			0.167	0.923	1.528
			0.5	0.80000E-01	
6321	'HYGOV'	M2	3.00E-02	1	2.50E-02
			0.167	0.923	0.357
			0.5	0.80000E-01	

6671	'HYGOV'	G1	1.0000 /	0.8	14.5	3.00E-02
	1		3.00E-02	0.95	0.53	1.15
	1.36		0.80000E-01/			
6672	'HYGOV'	G2	3.00E-02	0.8	14.5	3.00E-02
	1		0.167	0.95	0.53	1.15
	1.36		0.80000E-01/			
6682	'HYGOV'	G1	3.00E-02	0.8	4	3.00E-02
	0.2		0.167	0.87	0.45	1
	1.2		0.80000E-01/			
6682	'HYGOV'	G2	3.00E-02	0.8	4	3.00E-02
	0.2		0.167	0.87	0.45	1
	1.2		0.80000E-01/			
6682	'HYGOV'	G3	3.00E-02	0.8	4	3.00E-02
	0.2		0.167	0.87	0.45	1
	1.2		0.80000E-01/			
6684	'HYGOV'	G1	3.00E-02	0.8	4	3.00E-02
	0.2		0.167	0.87	0.45	1
	1.2		0.5	0.80000E-01/		
6684	'HYGOV'	G2	3.00E-02	0.8	4	3.00E-02
	0		0.037	0.95	0.45	1
	1.2		0.5	0.80000E-01/		
6692	'PDDGOV'	G1	0	4.00E-02	0	3
	0.7		0	1.00E-02	2.00E-02	0
	0		0.5	0.5	0.75	0.75
	1		1	0	1	0.2
	1.65		0.0000 /			
6693	'PDDGOV'	G2	0	4.00E-02	0	3
	0.7		0	1.00E-02	2.00E-02	0
	0		0.5	0.5	0.75	0.75
	1		1	0	1	0.2
	1.65		0.0000 /			
6694	'PDDGOV'	G3	0	4.00E-02	0	3
	0.7		0	1.00E-02	2.00E-02	0
	0		0.5	0.5	0.75	0.75
	1		1	0	1	0.2
	1.65		0.0000 /			
6696	'WPGOVT'	G1	3.00E-02	0.8	4	3.00E-02
	0.2		0.17	1	4.50E-02	1
	1.2		0.5	0.80000E-01/		
6697	'HYGOV'	G2	3.00E-02	0.8	4	3.00E-02
	0.2		0.17	1	4.50E-02	1
	1.2		0.5	0.80000E-01/		
6699	'HYGOV'	G1	3.00E-02	0.8	4	3.00E-02
	0.2		0.17	1	4.50E-02	1
	1.2		0.5	0.80000E-01/		
6700	'HYGOV'	G2	3.00E-02	0.8	4	3.00E-02
	0.2		0.17	1	4.50E-02	1
	1.2		0.5	0.80000E-01/		
6701	'HYGOV'	G3	3.00E-02	0.8	4	3.00E-02
	0.2		0.17	1	4.50E-02	1
	1.2		0.5	0.80000E-01/		
6711	'WPIDPHY'	G1	1.00E-02	5.00E-02	0.1	5.00E-02
	0		2.00E-02	1.00E-02	5.00E-02	-5.00E-02
	1		0.545	1.4	0.954	0.3826
	0.161		0.3	0.545	0.4	0.827
	0.83		1.0000 /			
6721	'WPIDPHY'	G2	1.00E-02	5.00E-02	0.1	5.00E-02
	0		2.00E-02	1.00E-02	5.00E-02	-5.00E-02
	1		0.545	1.4	0.954	0.3826
	0.161		0.3	0.545	0.4	0.827
	0.83		1.0000 /			
6721	'WPIDPHY'	G3	1.00E-02	5.00E-02	0.1	5.00E-02
	0		2.00E-02	1.00E-02	5.00E-02	-5.00E-02
	1		0.545	1.4	0.954	0.3826
	0.161		0.3	0.545	0.4	0.827
	0.83		1.0000 /			
6731	'WPIDPHY'	G1	1.00E-02	5.00E-02	0.1	5.00E-02
	0		2.00E-02	1.00E-02	5.00E-02	-5.00E-02
	1		0.545	1.4	0.954	0.3826
	0.161		0.3	0.545	0.4	0.827
	0.83		1.0000 /			
6731	'WPIDPHY'	G2	1.00E-02	5.00E-02	0.1	5.00E-02
	0		2.00E-02	1.00E-02	5.00E-02	-5.00E-02
	1		0.545	1.4	0.954	0.3826
	0.161		0.3	0.545	0.4	0.827
	0.83		1.0000 /			
6731	'WPIDPHY'	G3	1.00E-02	5.00E-02	0.1	5.00E-02
	0		2.00E-02	1.00E-02	5.00E-02	-5.00E-02
	1		0.545	1.4	0.954	0.3826
	0.161		0.3	0.545	0.4	0.827
	0.83		1.0000 /			
6736	'WPIDPHY'	G1	1.00E-02	5.00E-02	0.1	5.00E-02
	0		2.00E-02	1.00E-02	5.00E-02	-5.00E-02
	1		0.545	1.4	0.954	0.383
	0.161		0.3	0.545	0.4	0.827
	0.83		1.0000 /			
6736	'WPIDPHY'	G2	1.00E-02	5.00E-02	0.1	5.00E-02
	0		2.00E-02	1.00E-02	5.00E-02	-5.00E-02
	1		0.545	1.4	0.954	0.383
	0.161		0.3	0.545	0.4	0.827
	0.83		1.0000 /			
6741	'HYGOV'	G1	3.00E-02	0.8	14.5	3.00E-02
	1		0.167	0.95	0.53	1.15
	1.36		0.80000E-01/			
6741	'HYGOV'	G2	3.00E-02	0.8	14.5	3.00E-02
	1		0.167	0.95	0.53	1.15
	1.36		0.80000E-01/			
6750	'HYGOV'	G1	3.00E-02	1	16	2.50E-02
	0.2		0.167	0.8	5.00E-02	2.52
	1.05		0.5	0.80000E-01/		
6750	'HYGOV'	G2	3.00E-02	1	16	2.50E-02
	0.2		0.167	0.8	5.00E-02	2.52
	1.05		0.5	0.80000E-01/		
6764	'WPIDPHY'	G1	1.00E-02	5.00E-02	0.1	5.00E-02
	0		2.00E-02	1.00E-02	5.00E-02	-5.00E-02
	1		0.545	1.4	0.954	0.383
	0.161		0.3	0.545	0.4	0.827
	0.83		1.0000 /			
6766	'HYGOV'	G1	3.00E-02	1	14.28	2.50E-02
	0.2		0.167	1.2	1.00E-02	2.52
	1.05		0.5	0.80000E-01/		
6766	'HYGOV'	G2	3.00E-02	1	14.28	2.50E-02
	0.2		0.167	1.2	1.00E-02	2.52
	1.05		0.5	0.80000E-01/		
6769	'WPIDPHY'	G1	1.00E-02	5.00E-02	0.1	5.00E-02
	0		2.00E-02	1.00E-02	5.00E-02	-5.00E-02
	1		0.545	1.4	0.954	0.383
	0.161		0.3	0.545	0.4	0.827
	0.83		1.0000 /			
6772	'WPIDPHY'	G1	1.00E-02	5.00E-02	0.1	5.00E-02
	0		2.00E-02	1.00E-02	5.00E-02	-5.00E-02
	1		0.545	1.4	0.954	0.383
	0.161		0.3	0.545	0.4	0.827
	0.83		1.0000 /			
6774	'HYGOV'	G1	3.00E-02	0.8	14.28	2.50E-02
	0.2		0.167	0.95	0.45	0.36
	1.05		0.5	0.80000E-01/		
6774	'HYGOV'	G2	3.00E-02	0.8	14.28	2.50E-02
	0.2		0.167	0.95	0.45	0.36
	1.05		0.5	0.80000E-01/		
6778	'HYGOV'	G1	3.00E-02	0.8	14.28	2.50E-02
	0.2		0.167	1.2	1.00E-02	2.52
	1.05		0.5	0.80000E-01/		
6781	'WPIDPHY'	G1	1.00E-02	5.00E-02	0.1	5.00E-02
	0		2.00E-02	1.00E-02	5.00E-02	-5.00E-02
	1		0.545	1.4	0.954	0.383
	0.161		0.3	0.545	0.4	0.827
	0.83		1.0000 /			
6781	'WPIDPHY'	G2	1.00E-02	5.00E-02	0.1	5.00E-02
	0		2.00E-02	1.00E-02	5.00E-02	-5.00E-02
	1		0.545	1.4	0.954	0.383
	0.161		0.3	0.545	0.4	0.827
	0.83		1.0000 /			
6783	'WPIDPHY'	G1	1.00E-02	5.00E-02	0.1	5.00E-02

		0	2.00E-02	1.00E-02	5.00E-02	-5.00E-02
		1	0.545	1.4	0.954	0.383
		0.161	0.3	0.545	0.4	0.827
		0.83	1.0000	/		
6783	'WPHY'	G2	1.00E-02	5.00E-02	0.1	5.00E-02
		0	2.00E-02	1.00E-02	5.00E-02	-5.00E-02
		1	0.545	1.4	0.954	0.383
		0.161	0.3	0.545	0.4	0.827
		0.83	1.0000	/		
6784	'HYGOV'	G1	3.00E-02	1	14.28	2.50E-02
		0.1	0.167	1.2	1.00E-02	2.52
		1.05	0.5	0.8000E-01	/	
6785	'HYGOV'	G2	3.00E-02	1.00E-02	14.28	2.50E-02
		0.2	0.167	1.2	1.00E-02	2.52
		1.05	0.5	0.8000E-01	/	
6791	'HYGOV'	G1	3.00E-02	0.8	4	3.00E-02
		0.2	0.167	0.87	0.45	1
		1.2	0.5	0.8000E-01	/	
6792	'HYGOV'	G2	3.00E-02	0.8	4	3.00E-02
		0.2	0.167	0.87	0.45	1
		1.2	0.5	0.8000E-01	/	
6801	'WPHY'	G1	1.00E-02	5.00E-02	0.1	5.00E-02
		0	2.00E-02	1.00E-02	5.00E-02	-5.00E-02
		1	0.545	1.4	0.954	0.3826
		0.161	0.3	0.545	0.4	0.827
		0.83	1.0000	/		
6801	'WPHY'	G2	1.00E-02	5.00E-02	0.1	5.00E-02
		0	2.00E-02	1.00E-02	5.00E-02	-5.00E-02
		1	0.545	1.4	0.954	0.3826
		0.161	0.3	0.545	0.4	0.827
		0.83	1.0000	/		
6821	'WPHY'	G1	1.00E-02	5.00E-02	0.1	5.00E-02
		0	2.00E-02	1.00E-02	5.00E-02	-5.00E-02
		1	0.545	1.4	0.954	0.3826
		0.161	0.3	0.545	0.4	0.827
		0.83	1.0000	/		
6831	'WPHY'	G1	1.00E-02	5.00E-02	0.1	5.00E-02
		0	2.00E-02	1.00E-02	5.00E-02	-5.00E-02
		1	0.545	1.4	0.954	0.3826
		0.161	0.3	0.545	0.4	0.827
		0.83	1.0000	/		
6831	'WPHY'	G2	1.00E-02	5.00E-02	0.1	5.00E-02
		0	2.00E-02	1.00E-02	5.00E-02	-5.00E-02
		1	0.545	1.4	0.954	0.3826
		0.161	0.3	0.545	0.4	0.827
		0.83	1.0000	/		
6841	'HYGOV'	G1	3.00E-02	1	14	2.50E-02
		0.2	0.167	1.2	1.00E-02	2.8
		1.05	0.5	0.8000E-01	/	
6841	'HYGOV'	G2	3.00E-02	1	14	2.50E-02
		0.2	0.167	1.2	1.00E-02	2.8
		1.05	0.5	0.8000E-01	/	
6851	'WPHY'	G1	1.00E-02	5.00E-02	0.1	5.00E-02
		0	2.00E-02	1.00E-02	5.00E-02	-5.00E-02
		1	0.545	1.4	0.954	0.3826
		0.161	0.3	0.545	0.4	0.827
		0.83	1.0000	/		
6861	'HYGOV'	G1	3.00E-02	1	14.28	2.50E-02
		0.2	0.167	1	1.00E-02	0.357
		1.05	0.5	0.8000E-01	/	
6861	'HYGOV'	G2	3.00E-02	1	14.28	2.50E-02
		0.2	0.167	1	1.00E-02	0.357
		1.05	0.5	0.8000E-01	/	
6861	'HYGOV'	G3	3.00E-02	1	14.28	2.50E-02
		0.2	0.167	1	1.00E-02	0.357
		1.05	0.5	0.8000E-01	/	
6871	'HYGOV'	G1	3.00E-02	1	16	2.50E-02
		0.2	0.167	1.2	1.00E-02	2.52
		1.05	0.5	0.8000E-01	/	
6871	'HYGOV'	G2	3.00E-02	1	16	2.50E-02
		0.2	0.167	1.2	1.00E-02	2.52
		1.05	0.5	0.8000E-01	/	
6930	'HYGOV'	G1	3.00E-02	0.8	14.28	2.50E-02
		0.2	0.167	1	0.25	0.357
		1.05	0.5	0.8000E-01	/	
6935	'HYGOV'	G1	3.00E-02	0.8	14.28	2.50E-02
		0.2	0.167	1	0.25	0.357
		1.05	0.5	0.8000E-01	/	
6940	'WPHY'	G1	1.00E-02	5.00E-02	0.1	5.00E-02
		0	2.00E-02	1.00E-02	5.00E-02	-5.00E-02
		1	0.545	1.4	0.954	0.3826
		0.161	0.3	0.545	0.4	0.827
		0.83	1.0000	/		
6940	'WPHY'	G2	1.00E-02	5.00E-02	0.1	5.00E-02
		0	2.00E-02	1.00E-02	5.00E-02	-5.00E-02
		1	0.545	1.4	0.954	0.3826
		0.161	0.3	0.545	0.4	0.827
		0.83	1.0000	/		
6951	'WPHY'	G1	1.00E-02	5.00E-02	0.1	5.00E-02
		0	2.00E-02	1.00E-02	5.00E-02	-5.00E-02
		1	0.545	1.4	0.954	0.3826
		0.161	0.3	0.545	0.4	0.827
		0.83	1.0000	/		

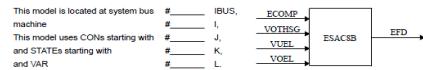
MODELO DE EXCITADORES

Interpretación:

IBUS	'ESAC8B'	I	TR	KP	KI	KD	TD	KA	TA	VRMAX	VRMIN	TE	KE	E1	SE(E1)	E2	SE(E2)
6106	'ESAC8B'	M1	0	170	130	60	0.03	1	0	10	0	1	1	3.8	1.36	4.5	1.5/

G.7 ESAC8B

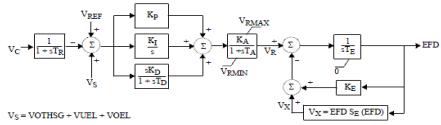
Basler DECS



CONs	#	Value	Description	CONs	#	Value	Description
J		T _E (sec)	IBUS,	J+8		V _{REF}	ECOMP
J+1		K _p	I	J+9		V _{OTHSG}	YADIFD
J+2		K _i	J	J+10		V _{UEL}	VOEL
J+3		K _d	K	J+11			
J+4		T _D (sec)	L	J+12			
J+5		K _a		J+13			
J+6		T _A		J+14			
J+7		V _{RMAX} or zero					

STATES	#	Description	VARs	#	Description
K		Sensed V _r	L		K _e
K+1		Integral controller			
K+2		Derivative controller			
K+3		Voltage regulator			
K+4		Exciter output, EFD			

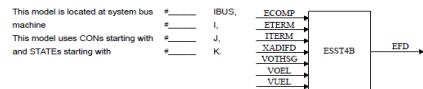
IBUS, 'ESAC8B', I, T_E, K_p, K_i, K_d, K_a, T_D, K_a, V_{RMAX}, V_{MIN}, T_E, K_e, E₁, S_E(E₁), E₂, S_E(E₂)



IBUS	'ESS74B'	I	TR	Kpr	Kir	VRMAX	VRMIN	TA	KPM	KIM	VMMAX	VMMIN	KG	KP	KI	VBMAX	KC	KL	THETAP
6077	'ESS74B'	T8	0	3.38	3.38	1	-0.87	0.01	1	0	1	-0.87	0	5.92	0	7.4	0.11	0	2/

G.13 ESS74B

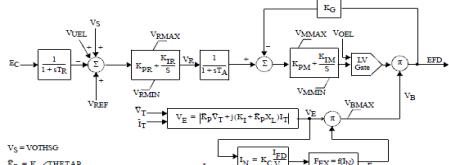
IEEE Type ST4B Potential or Compounded Source-Controlled Rectifier Exciter



CONs	#	Value	Description	CONs	#	Value	Description
J		T _E (sec)	IBUS,	J+8		V _{MIN}	ECOMP
J+1		K _p	I	J+9		K _G	YTRM
J+2		K _{ir}	J	J+10		K _P	YADIFD
J+3		V _{RMAX}	K	J+11		K _I	VOTHSG
J+4		V _{MIN}	L	J+12		V _{BMAX}	VOEL
J+5		T _A (sec)		J+13		V _{MMAX}	
J+6		K _{PM}		J+14		K _C	
J+7		K _M		J+15		X _L	
J+8		V _{MMAX}		J+16		THETAP	

STATES	#	Description
K		Sensed V _r
K+1		Regulator integrator
K+2		Regulator output, V _R
K+3		V _M

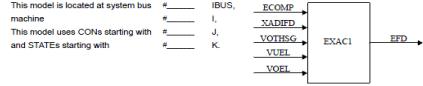
IBUS, 'ESS74B', I, T_E, K_p, K_{ir}, V_{RMAX}, V_{MIN}, T_A, K_{PM}, K_M, V_{MMAX}, V_{MMIN}, K_G, K_C, V_{BMAX}, K_C, X_L, THETAP/



IBUS	'EXAC1'	I	TR	TB	TC	KA	TA	VRMAX	VRMIN	TE	KF	TF	KC	KD	KE	E1	SE(E1)	E2	SE(E2)
6104	'EXAC1'	CO	0	1	1	4000	0.05	56	0	1.5	0.025	0.4	0.1	2	1	9	0.001	10	0.01/

G.15 EXAC1

IEEE Type AC1 Excitation System



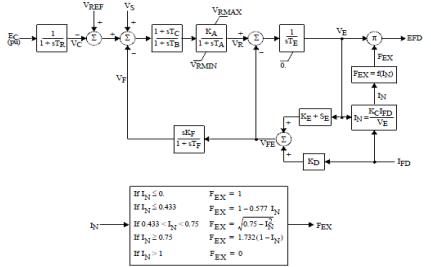
CONs	#	Value	Description	CONs	#	Value	Description
J		T _E (sec)	IBUS,	J+8		T _E > 0 (sec)	ECOMP
J+1		T _E (sec)	I	J+9		K _C	YADIFD
J+2		T _C (sec)	J	J+10		K _O	VOTHSG
J+3		K _a	K	J+11		K _E	VOEL
J+4		T _A (sec)	L	J+12		K _F	
J+5		V _{RMAX}		J+13		E ₁	
J+6		V _{MIN}		J+14		S _E (E ₁)	
J+7		T _E > 0 (sec)		J+15		E ₂	
				J+16		S _E (E ₂)	

$\text{M}_1 \text{I}_2 < 0 \quad F_{\text{EX}} = 1$
 $\text{M}_1 \text{I}_2 > 0.433 \quad F_{\text{EX}} = 1 - 0.577 \text{I}_2$
 $0.6433 - \text{I}_2 < 0.75 \quad F_{\text{EX}} = \frac{0.75 - \text{I}_2}{0.75 - 0.6433}$
 $\text{I}_2 < 0.75 \quad F_{\text{EX}} = 1.732(1 - \text{I}_2)$
 $\text{I}_2 > 1 \quad F_{\text{EX}} = 0$

| J+8 | | - - - - - | | - - - - - | | - - - - - |

STATES	#	Description
K		Sensed E_T
K+1		Lead lag
K+2		Regulator output
K+3		V_E
K+4		Feedback output

IBUS, 'EXAC1', I, T_R , T_B , T_C , K_A , T_A , V_{RMAX} , V_{RMIN} , T_E , K_F , T_F , K_C , K_D , K_E , E_1 , $S_E(E_1)$, E_2 , $S_E(E_2)$

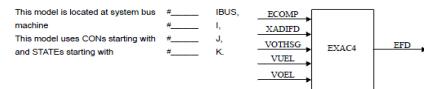


$V_S = VOTHSG + VUEL + VOEL$

IBUS	EXAC1'	I	TR	VIMAX	VIMIN	TC	TB	KA	TA	VRMAX	VRMIN	KC
6078	'EXAC1'	V9	0	0.2	-0.2	1.149	22.97	1000	0.002	5.236	-4.189	0/

G.19 EXAC4

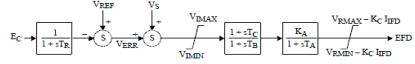
IEEE Type AC4 Excitation System



CONs	#	Value	Description
J		T_R	
J+1		V_{RMAX}	
J+2		V_{RMIN}	
J+3		T_A	
J+4		T_B (sec)	
J+5		K_A	
J+6		T_C	
J+7		V_{RMAX}	
J+8		V_{RMIN}	
J+9		K_C	

STATES	#	Description
K		$V_{measured}$
K+1		Lead lag
K+2		V_E

IBUS, 'EXAC4', I, T_R , V_{RMAX} , V_{RMIN} , T_C , T_B , K_A , T_A , V_{RMAX} , V_{RMIN} , K_C

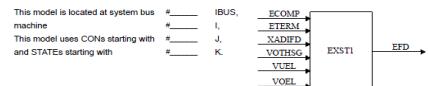


$V_S = VOTHSG + VUEL + VOEL$

IBUS	EXST1'	I	TR	VIMAX	VIMIN	TC	TB	KA	TA	VRMAX	VRMIN	KC	KF	TF
6090	'EXST1'	E1	0.025	3	-3	0.005	0.0937	100	0.0027	3	-3	0.02	0.1	1.5/

G.24 EXST1

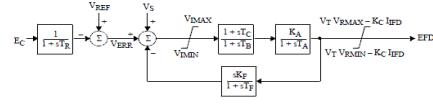
IEEE Type ST1 Excitation System



CONs	#	Value	Description	CONs	#	Value	Description
J		T_R		J+6		T_A (sec)	
J+1		V_{RMAX}		J+7		V_{RMAX}	
J+2		V_{RMIN}		J+8		V_{RMIN}	
J+3		T_C		J+9		K_A	
J+4		T_B (sec)		J+10		K_F	
J+5		K_A		J+11		$T_F (-0)$ (sec)	

STATES	#	Description
K		$V_{measured}$
K+1		Lead lag
K+2		V_E
K+3		Feedback

IBUS, 'EXST1', I, T_R , V_{RMAX} , V_{RMIN} , T_C , T_B , K_A , T_A , V_{RMAX} , V_{RMIN} , K_C , K_F , T_F

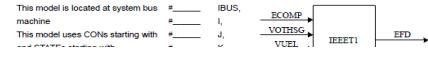


$V_S = VOTHSG + VUEL + VOEL$

IBUS	IEEET1'	I	TR	KA	TA	VRMAX	VRMIN	KE	TE	KF	TF	0	E1	SE(E1)	E2	SE(E2)
6072	'IEEET1'	V3	0	126.37	1	2	0	1	0.8	0.078	0.726	0	2.4	0.03	5	0.5/

G.28 IEEEET1

IEEE Type 1 Excitation System



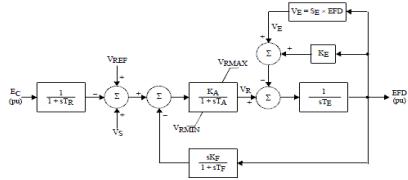
and STATES starting with



CONs	#	Value	Description
J		T_R (sec)	
J+1		K_A	
J+2		T_A (sec)	
J+3		V_{RMAX} or zero	
J+4		V_{RMIN}	
J+5		K_E or zero	
J+6		$T_E (-0)$ (sec)	
J+7		K_F	
J+8		$T_F (-0)$ (sec)	
J+9	0	Switch	
J+10		E_1	
J+11		$S_E(E_1)$	
J+12		E_2	
J+13		$S_E(E_2)$	

STATEs	#	Description
K		Sensed V_T
K+1		Regulator output, V_R
K+2		Exciter output, EFD
K+3		Rate feedback integrator

IBUS, 'IEEET1', I, T_R , K_A , T_A , V_{RMAX} , V_{RMIN} , K_E , T_E , K_F , T_F , 0., E_1 , $S_E(E_1)$, E_2 , $S_E(E_2)$ /



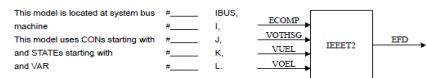
$$V_S = VOTHSG + VUEL + VOEL$$

Note: S_E is the saturation function.

IBUS	'IEEET2'	I	TR	KA	TA	VRMAX	VRMIN	KE	TE	KF	TF1	TF2	E1	SE(E1)	E2	SE(E2)
6075	'IEEET2'	J5	0.025	400	0.1	6.59	0	1	1.3	0.05	0.8	1.3	2.4	0.03	5	0.5/

G.29 IEEET2

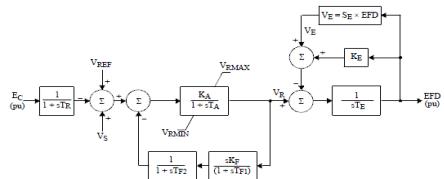
IEEE Type 2 Excitation System



CONs	#	Value	Description
J		T_R (sec)	
J+1		K_A	
J+2		T_A (sec)	
J+3		V_{RMAX} or zero	
J+4		V_{RMIN}	
J+5		K_E	
J+6		$T_E (-0)$ (sec)	
J+7		K_F	
J+8		$T_F1 (-0)$ (sec)	
J+9		$T_F2 (-0)$ (sec)	
J+10		E_1	
J+11		$S_E(E_1)$	
J+12		E_2	
J+13		$S_E(E_2)$	

STATEs	#	Description
K		Sensed V_T
K+1		Regulator output, V_R
K+2		Exciter output, EFD
K+3		First feedback integrator
K+4		Second feedback integrator

IBUS, 'IEEET2', I, T_R , K_A , T_A , V_{RMAX} , V_{RMIN} , K_E , T_E , K_F , T_F1 , T_F2 , E_1 , $S_E(E_1)$, E_2 , $S_E(E_2)$ /



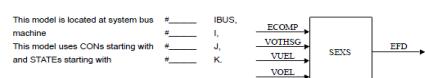
$$V_S = VOTHSG + VUEL + VOEL$$

Note: S_E is the saturation function.

IBUS	'SEXS'	I	TA/TB	TB	K	TE	EMIN	EMAX
6113	'SEXS'	G1	0.1	10	100	0.05	0	4/

G.42 SEXS

Simplified Excitation System

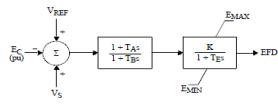


CONs	#	Value	Description
J		T_R/T_B	
J+1		$T_A (-0)$ (sec)	
J+2		K	
J+3		T_E (sec)	
J+4		E_{MIN} (pu on EFD base)	
J+5		E_{MAX} (pu on EFD base)	

STATEs	#	Description
K		First integrator
K+1		Second integrator

IBUS, 'SEXS', I, T_R/T_B , T_A , K , T_E , E_{MIN} , E_{MAX} /

IBUS, 'SEXS', I, T_A/T_B, T_B, K, T_E, E_{MIN}, E_{MAX}/



V_S = VOTHSG + VUEL + VOEL

Información de Base de Datos:

6071	'IEET1' V2	0	217.03	1	2	
		0	1	0.8	7.80E-02	0.726
		0	2.4	3.00E-02	5	0.50000 /
6072	'IEET1' V3	0	126.37	1	2	
		0	1	0.8	7.80E-02	0.726
		0	2.4	3.00E-02	5	0.50000 /
6073	'IEET1' V4	0	126.37	1	2	
		0	1	0.8	7.80E-02	0.726
		0	2.4	3.00E-02	5	0.50000 /
6075	'IEET2' J5	2.50E-02	400	0.1	6.59	
		0	1	1.3	5.00E-02	0.8
		1.3	2.4	3.00E-02	5	0.50000 /
6076	'IEET2' J6	2.50E-02	400	0.1	6.59	
		0	1	1.3	5.00E-02	0.8
		1.3	2.4	3.00E-02	5	0.50000 /
6077	'EST4B' T8	0	3.38	3.38	1	
		-0.87	1.00E-02	1	0	1
		-0.87	0	5.92	0	7.4
		0.11	0	2.0000	/	
6078	'EXAC4' V9	0	0.2	-0.2	1.149	
		22.97	1000	2.00E-03	5.236	-4.189
		0.0000	/			
6090	'EXST1' E1	2.50E-02	3	-3	5.00E-03	
		9.37E-02	100	2.70E-03	3	-3
		2.00E-02	0.1	1.5000	/	
6091	'EXST1' E2	2.50E-02	3	-3	5.00E-03	
		9.37E-02	100	2.70E-03	3	-3
		2.00E-02	0.1	1.5000	/	
6094	'EXST1' L1	2.50E-02	3	-3	5.00E-03	
		9.37E-02	80	2.70E-03	3	-3
		2.00E-02	0.1	1.5000	/	
6095	'EXST1' L2	2.50E-02	3	-3	5.00E-03	
		9.37E-02	80	2.70E-03	3	-3
		2.00E-02	0.1	1.5000	/	
6097	'EXST1' F1	2.50E-02	3	-3	1	
		5	60	1.33E-03	6	-5.3
		0	0	0.30000	/	
6098	'EXST1' F2	2.50E-02	3	-3	1	
		5	60	1.33E-03	6	-5.3
		0	0	0.30000	/	
6099	'EXST1' F3	2.50E-02	3	-3	1	
		5	60	1.33E-03	6	-5.3
		0	0	0.30000	/	
6101	'EXST1' B1	2.50E-02	3	-3	5.00E-03	
		8.80E-02	60	1.33E-03	6	-5.3
		2.00E-02	0.1	1.5000	/	
6102	'EXST1' B2	2.50E-02	3	-3	5.00E-03	
		8.80E-02	60	1.33E-03	6	-5.3
		2.00E-02	0.1	1.5000	/	
6106	'ESAC8B' M1	0	170	130	60	
		3.00E-02	1	0	10	0
		1	1	3.8	1.36	4.5
		1.5000	/			
6106	'ESAC8B' M2	0	170	130	60	
		3.00E-02	1	0	10	0
		1	1	3.8	1.36	4.5
		1.5000	/			
6106	'ESAC8B' M3	0	170	130	60	
		3.00E-02	1	0	10	0
		1	1	3.8	1.36	4.5
		1.5000	/			
6107	'ESAC8B' M4	0	170	130	60	
		3.00E-02	1	0	10	0
		1	1	3.8	1.36	4.5
		1.5000	/			
6107	'ESAC8B' M5	0	170	130	60	
		3.00E-02	1	0	10	0
		1	1	3.8	1.36	4.5
		1.5000	/			
6107	'ESAC8B' M6	0	170	130	60	
		3.00E-02	1	0	10	0
		1	1	3.8	1.36	4.5
		1.5000	/			
6110	'EXST1' B3	2.50E-02	4	-1	7.50E-03	
		5.00E-02	50	5.00E-03	10	-10
		2.00E-02	0.1	1.5000	/	
6121	'ESAC8B' G9	0	100	150	25	
		3.00E-02	1	0	10	0
		1	1	3.8	1.36	4.5
		1.5000	/			
6122	'ESAC8B' G1	0	100	150	25	
		3.00E-02	1	0	10	0
		1	1	3.8	1.36	4.5
		1.5000	/			
6127	'ESAC8B' G6	0	170	130	60	
		3.00E-02	1	0	10	0
		1	1	3.8	1.36	4.5
		1.5000	/			
6130	'SEXS' G5	0.1	10	100	5.00E-02	
		0	4.0000	/		
6134	'SEXS' G1	0.1	10	100	5.00E-02	
		0	4.0000	/		
6135	'SEXS' G2	0.1	10	100	5.00E-02	
		0	4.0000	/		
6136	'SEXS' G3	0.1	10	100	5.00E-02	
		0	4.0000	/		
6140	'SEXS' G1	0.1	10	100	5.00E-02	
		1	1	3.8	1.36	4.5
		1.5000	/			
6140	'SEXS' G2	0.1	10	100	5.00E-02	
		0	4.0000	/		
6140	'SEXS' G3	0.1	10	100	5.00E-02	
		0	4.0000	/		
6140	'SEXS' G4	0.1	10	100	5.00E-02	
		0	4.0000	/		
6140	'SEXS' G5	0.1	10	100	5.00E-02	
		0	4.0000	/		
6140	'SEXS' G6	0.1	10	100	5.00E-02	
		0	4.0000	/		
6155	'ESAC8B' G7	0	170	130	60	

	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6155	'ESAC8B' G8	0	170	130	60	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6172	'ESAC8B' P1	0	170	130	60	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6172	'ESAC8B' P2	0	170	130	60	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6172	'ESAC8B' P3	0	170	130	60	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6176	'EXST1' E1	2.00E-02	10	-10	2.50E-02	
	0.1	30	5.00E-02	3.5	-3.1	
	6.00E-02	0.1	1.5000	/		
6177	'EXST1' E2	2.00E-02	10	-10	2.50E-02	
	0.1	30	5.00E-02	3.5	-3.1	
	6.00E-02	0.1	1.5000	/		
6264	'EXST1' G1	2.50E-02	3	-3	1	
	5	60	1.33E-03	6	-5.3	
	0	0	0.30000	/		
6265	'EXST1' G2	2.50E-02	3	-3	1	
	5	60	1.33E-03	6	-5.3	
	0	0	0.30000	/		
6268	'EXST1' G3	2.50E-02	3	-3	8.00E-03	
	8.80E-02	80	3.00E-03	3	-3	
	2.00E-02	1.00E-02	1.5000	/		
6271	'ESAC8B' G1	0	100	150	25	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6271	'ESAC8B' G2	0	100	150	25	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6271	'ESAC8B' G4	0	100	150	25	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6271	'ESAC8B' G5	0	100	150	25	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6272	'ESAC8B' G0	0	100	150	25	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6272	'ESAC8B' G6	0	100	150	25	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6272	'ESAC8B' G7	0	100	150	25	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6272	'ESAC8B' G8	0	100	150	25	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6272	'ESAC8B' G9	0	100	150	25	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6281	'IEET1' G1	0	200	1.40E-02	7.3	
	-6.6	0.8	0.8	2.00E-02	0.8	
	0	2.4	3.00E-02	5	0.50000	/
6281	'IEET1' G2	0	200	1.40E-02	7.3	
	-6.6	0.8	0.8	2.00E-02	0.8	
	0	2.4	3.00E-02	5	0.50000	/
6281	'IEET1' G3	0	200	1.40E-02	7.3	
	-6.6	0.8	0.8	2.00E-02	0.8	
	0	2.4	3.00E-02	5	0.50000	/
6281	'IEET1' G4	0	200	1.40E-02	7.3	
	-6.6	0.8	0.8	2.00E-02	0.8	
	0	2.4	3.00E-02	5	0.50000	/
6282	'IEET1' G5	0	400	2.00E-02	7.3	
	-6.6	0.8	0.8	2.00E-02	0.8	
	0	2.4	3.00E-02	5	0.50000	/
6282	'IEET1' G6	0	400	2.00E-02	7.3	
	-6.6	0.8	0.8	2.00E-02	0.8	
	0	2.4	3.00E-02	5	0.50000	/
6282	'IEET1' G7	0	400	2.00E-02	7.3	
	-6.6	0.8	0.8	2.00E-02	0.8	
	0	2.4	3.00E-02	5	0.50000	/
6282	'IEET1' G8	0	400	2.00E-02	7.3	
	-6.6	0.8	0.8	2.00E-02	0.8	
	0	2.4	3.00E-02	5	0.50000	/
6291	'ESAC8B' G1	0	100	150	25	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6292	'ESAC8B' G2	0	100	150	25	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6293	'ESAC8B' G3	0	100	150	25	
	3.00E-02	1	0	10	0	
	1	1	3.8	1.36	4.5	
	1.5000	/				
6321	'EXST1' M1	2.50E-02	3	-3	5.00E-03	
	9.37E-02	80	2.70E-03	3	-3	
	2.00E-02	6.60E-02	1.5000	/		
6321	'EXST1' M2	2.50E-02	3	-3	5.00E-03	
	9.37E-02	80	2.70E-03	3	-3	
	2.00E-02	6.60E-02	1.5000	/		
6333	'EXST1' G1	2.50E-02	3	-3	8.00E-03	
	8.80E-02	80	2.70E-03	3	-3	
	2.00E-02	0.1	1.5000	/		
6334	'EXST1' G2	2.50E-02	3	-3	8.00E-03	
	8.80E-02	80	2.70E-03	3	-3	
	2.00E-02	0.1	1.5000	/		
6335	'EXST1' G1	0	3	-3	1	

	1	180	2.50E-02	5	-5
	0	2.00E-03	0.40000 /		
6336	'EXST1' G2	0	3	-3	1
	1	180	2.50E-02	5	-5
	0	2.00E-03	0.40000 /		
6361	'ESAC8B' G1	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6362	'ESAC8B' G2	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6364	'ESAC8B' G1	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6365	'ESAC8B' G2	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6367	'EXST1' G1	2.50E-02	3	-3	8.00E-03
	8.80E-02	80	3.00E-03	3	-3
	2.00E-02	1.00E-02	1.5000 /		
6368	'EXST1' G2	2.50E-02	3	-3	8.00E-03
	8.80E-02	80	3.00E-03	3	-3
	2.00E-02	1.00E-02	1.5000 /		
6371	'IEET1' G1	1.00E-02	200	2.00E-02	5
	-4	1	0.7	3.50E-02	1.5
	0	2.4	3.00E-02	5	0.50000 /
6372	'IEET1' G2	1.00E-02	200	2.00E-02	5
	-4	1	0.7	3.50E-02	1.5
	0	2.4	3.00E-02	5	0.50000 /
6384	'EXST1' G1	2.50E-02	3	-3	5.00E-03
	9.37E-02	80	2.70E-03	3	-3
	2.00E-02	6.60E-02	1.5000 /		
6385	'EXST1' G2	2.50E-02	3	-3	5.00E-03
	9.37E-02	80	2.70E-03	3	-3
	2.00E-02	6.60E-02	1.5000 /		
6385	'EXST1' G2	2.50E-02	3	-3	5.00E-03
	9.37E-02	80	2.70E-03	3	-3
	2.00E-02	6.60E-02	1.5000 /		
6391	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	4.45	1.18	5.56
	1.2500 /				
6391	'ESAC8B' G2	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	4.45	1.18	5.56
	1.2500 /				
6413	'IEET1' G1	1.00E-02	200	2.00E-02	5
	-4	1	0.7	3.50E-02	1.5
	0	2.4	3.00E-02	5	0.50000 /
6414	'IEET1' G2	1.00E-02	200	2.00E-02	5
	-4	1	0.7	3.50E-02	1.5
	0	2.4	3.00E-02	5	0.50000 /
6416	'ESAC8B' G1	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6417	'ESAC8B' G2	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6418	'EXAC4' V3	0	0.2	-0.2	1.149
	22.97	1000	2.00E-03	5.236	-4.189
	0.0000 /				
6421	'ESAC8B' G1	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6422	'ESAC8B' G2	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6423	'EXAC4' V3	0	0.2	-0.2	1.149
	22.97	1000	2.00E-03	5.236	-4.189
	0.0000 /				
6426	'ESAC8B' G1	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6427	'ESAC8B' G2	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6428	'EXAC4' V2	0	0.2	-0.2	1.149
	22.97	1000	2.00E-03	5.236	-4.189
	0.0000 /				
6452	'EXST1' G1	2.50E-02	3	-3	5.00E-03
	9.40E-02	80	3.00E-03	3	-3
	2.00E-02	6.60E-02	1.5000 /		
6452	'EXST1' G2	2.50E-02	3	-3	5.00E-03
	9.40E-02	80	3.00E-03	3	-3
	2.00E-02	6.60E-02	1.5000 /		
6454	'EXST1' G1	2.50E-02	3	-3	8.00E-03
	8.80E-02	80	3.00E-03	3	-3
	2.00E-02	0.1	1.5000 /		
6454	'EXST1' G2	2.50E-02	3	-3	8.00E-03
	8.80E-02	80	3.00E-03	3	-3
	2.00E-02	0.1	1.5000 /		
6456	'EXST1' G1	2.50E-02	3	-3	5.00E-03
	9.40E-02	80	3.00E-03	3	-3
	2.00E-02	6.60E-02	1.5000 /		
6461	'EXST1' G1	2.50E-02	3	-3	1
	5	60	1.33E-03	6	-5.3
	0	0	0.30000 /		
6462	'EXST1' G2	2.50E-02	3	-3	1
	5	60	1.33E-03	6	-5.3
	0	0	0.30000 /		
6560	'EXST1' G1	2.50E-02	3	-3	8.00E-03
	8.80E-02	100	2.70E-03	3	-3
	2.00E-02	0.1	1.5000 /		
6570	'EXST1' G1	2.50E-02	3	-3	5.00E-03
	9.37E-02	80	2.70E-03	3	-3
	2.00E-02	6.60E-02	1.5000 /		
6570	'EXST1' G2	2.50E-02	3	-3	5.00E-03

	9.37E-02	80	2.70E-03	3	-3
6600	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500 /				
6621	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500 /				
6621	'ESAC8B' G2	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500 /				
6623	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500 /				
6623	'ESAC8B' G2	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500 /				
6631	'EXST1' G1	2.50E-02	3	-3	5.00E-03
	9.37E-02	80	2.70E-03	3	-3
	2.00E-02	6.60E-02	1.5000 /		
6631	'EXST1' G2	2.50E-02	3	-3	5.00E-03
	9.37E-02	80	2.70E-03	3	-3
	2.00E-02	6.60E-02	1.5000 /		
6641	'EXST1' G1	2.50E-02	3	-3	8.00E-03
	8.80E-02	80	2.70E-03	3	-3
	2.00E-02	0.1	1.5000 /		
6641	'EXST1' G2	2.50E-02	3	-3	8.00E-03
	8.80E-02	80	2.70E-03	3	-3
	2.00E-02	0.1	1.5000 /		
6651	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	5.56
	1.2500 /				
6661	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500 /				
6671	'EXST1' G1	2.50E-02	2	-2	8.00E-03
	8.80E-02	50	2.00E-03	3	-3
	0	0	0.30000 /		
6672	'EXST1' G2	2.50E-02	2	-2	8.00E-03
	8.80E-02	50	2.00E-03	3	-3
	0	0	0.30000 /		
6682	'EXST1' G1	2.50E-02	3	-3	8.00E-03
	8.80E-02	80	3.00E-03	3	-3
	2.00E-02	0.1	1.5000 /		
6682	'EXST1' G2	2.50E-02	3	-3	8.00E-03
	8.80E-02	80	3.00E-03	3	-3
	2.00E-02	0.1	1.5000 /		
6684	'EXST1' G3	2.50E-02	3	-3	8.00E-03
	8.80E-02	80	3.00E-03	3	-3
	2.00E-02	0.1	1.5000 /		
6684	'EXST1' G1	2.50E-02	3	-3	8.00E-03
	8.80E-02	80	3.00E-03	3	-3
	2.00E-02	0.1	1.5000 /		
6684	'EXST1' G2	2.50E-02	3	-3	8.00E-03
	8.80E-02	80	3.00E-03	3	-3
	2.00E-02	0.1	1.5000 /		
6692	'ESAC8B' G1	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6693	'ESAC8B' G2	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6694	'ESAC8B' G3	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6696	'ESAC8B' G1	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6697	'ESAC8B' G2	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6699	'ESAC8B' G1	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6700	'ESAC8B' G2	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6701	'ESAC8B' G3	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000 /				
6711	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	5.56
	1.2500 /				
6721	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500 /				
6721	'ESAC8B' G2	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500 /				
6731	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500 /				
6731	'ESAC8B' G2	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500 /				
6736	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500 /				
6736	'ESAC8B' G2	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500 /				

6741	'EXST1' G1	2.50E-02	2	-2	8.00E-03
	8.80E-02	50	2.00E-03	3	-3
	0	0	0.30000	/	
6741	'EXST1' G2	2.50E-02	2	-2	8.00E-03
	8.80E-02	50	2.00E-03	3	-3
	0	0	0.30000	/	
6750	'EXST1' G1	2.50E-02	3	-3	8.00E-03
	8.80E-02	100	2.70E-03	3	-3
	2.00E-02	0.1	1.5000	/	
6750	'EXST1' G2	2.50E-02	3	-3	8.00E-03
	8.80E-02	100	2.70E-03	3	-3
	2.00E-02	0.1	1.5000	/	
6750	'EXST1' G3	2.50E-02	3	-3	8.00E-03
	8.80E-02	100	2.70E-03	3	-3
	2.00E-02	0.1	1.5000	/	
6764	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500	/			
6764	'ESAC8B' G2	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500	/			
6766	'EXST1' G1	2.50E-02	3	-3	5.00E-03
	9.40E-02	80	3.00E-03	3	-3
	2.00E-02	6.60E-02	1.5000	/	
6766	'EXST1' G2	2.50E-02	3	-3	5.00E-03
	9.40E-02	80	3.00E-03	3	-3
	2.00E-02	6.60E-02	1.5000	/	
6769	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500	/			
6769	'ESAC8B' G2	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500	/			
6772	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500	/			
6772	'ESAC8B' G2	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500	/			
6774	'EXST1' G1	2.50E-02	3	-3	5.00E-03
	9.40E-02	80	3.00E-03	3	-3
	2.00E-02	6.60E-02	1.5000	/	
6774	'EXST1' G2	2.50E-02	3	-3	5.00E-03
	9.40E-02	80	3.00E-03	3	-3
	2.00E-02	6.60E-02	1.5000	/	
6778	'EXST1' G1	2.50E-02	3	-3	8.00E-03
	8.80E-02	100	3.00E-03	3	-3
	2.00E-02	0.1	1.5000	/	
6781	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500	/			
6781	'ESAC8B' G2	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500	/			
6784	'EXST1' G1	2.50E-02	3	-3	5.00E-03
	9.40E-02	80	3.00E-03	3	-3
	2.00E-02	6.60E-02	1.5000	/	
6785	'EXST1' G2	2.50E-02	3	-3	5.00E-03
	9.40E-02	80	3.00E-03	3	-3
	2.00E-02	6.60E-02	1.5000	/	
6791	'ESAC8B' G1	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000	/			
6792	'ESAC8B' G2	0	100	150	25
	3.00E-02	1	0	10	0
	1	1	3.8	1.36	4.5
	1.5000	/			
6801	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500	/			
6801	'ESAC8B' G2	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500	/			
6821	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	4.45	1.18	5.56
	1.2500	/			
6821	'ESAC8B' G2	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	4.45	1.18	5.56
	1.2500	/			
6831	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	4.45	1.18	5.56
	1.2500	/			
6831	'ESAC8B' G2	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	4.45	1.18	5.56
	1.2500	/			
6841	'EXST1' G1	2.50E-02	3	-3	8.00E-03
	8.80E-02	80	2.70E-03	3	-3
	2.00E-02	0.1	1.5000	/	
6841	'EXST1' G2	2.50E-02	3	-3	8.00E-03
	8.80E-02	80	2.70E-03	3	-3
	2.00E-02	0.1	1.5000	/	
6851	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500	/			
6861	'EXST1' G1	2.50E-02	3	-3	5.00E-03
	9.37E-02	80	2.70E-03	3	-3
	2.00E-02	6.60E-02	1.5000	/	
6861	'EXST1' G2	2.50E-02	3	-3	5.00E-03
	9.37E-02	80	2.70E-03	3	-3

	2.00E-02	6.60E-02	1.5000	/	
6861	'EXST1' G3	2.50E-02	3	-3	5.00E-03
	9.37E-02	80	2.70E-03	3	-3
	2.00E-02	6.60E-02	1.5000	/	
6871	'EXST1' G1	2.50E-02	3	-3	8.00E-03
	8.80E-02	100	2.70E-03	3	-3
	2.00E-02	0.1	1.5000	/	
6871	'EXST1' G2	2.50E-02	3	-3	8.00E-03
	8.80E-02	100	2.70E-03	3	-3
	2.00E-02	0.1	1.5000	/	
6930	'EXST1' G1	2.50E-02	3	-3	5.00E-03
	9.37E-02	80	2.70E-03	3	-3
	2.00E-02	6.60E-02	1.5000	/	
6935	'EXST1' G1	2.50E-02	3	-3	5.00E-03
	9.37E-02	80	2.70E-03	3	-3
	2.00E-02	6.60E-02	1.5000	/	
6940	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500	/			
6940	'ESAC8B' G2	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	3.45	1.18	4.56
	1.2500	/			
6951	'ESAC8B' G1	5.00E-02	2430	3530	250
	3.00E-02	1.00E-02	1.00E-02	7.53	0
	0.2	1	4.45	1.18	5.56
	1.2500	/			

MODELO DE ESTABILIZADORES

Interpretación:

IBUS	STAB2A'	I	K2	T2	K3	T3	K4	K5	T5	HLM
6097	'STAB2A'	F1	1	4.4	10	1.8	1	1.41	0.01	0.05/

F.8 STAB2A

Power Sensitive Stabilizing Unit (ASEA)

This model is located at system bus #_____ IBUS,

machine #_____ I,

This model uses CONs starting with #_____ J,

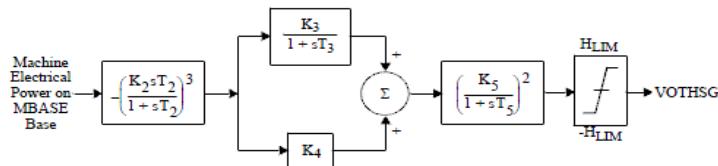
and STATEs starting with #_____ K.



CONs	#	Value	Description
J		K ₂	
J+1		T ₂ (sec) (>0)	
J+2		K ₃	
J+3		T ₃ (sec) (>0)	
J+4		K ₄	
J+5		K ₅	
J+6		T ₅ (sec) (>0)	
J+7		H _{LIM}	

STATEs	#	Description
K		Implicit
K+1		Integration
K+2		State
K+3		Variables

IBUS, 'STAB2A', I, K₂, T₂, K₃, T₃, K₄, K₅, T₅, H_{LIM}/



Información de Base de Datos:

6097	'STAB2A'	F1	1	4.4	10	1.8
	1		1.41	1.00E-02	0.50000E-01/	
6098	'STAB2A'	F2	1	4.4	10	1.8
	1		1.41	1.00E-02	0.50000E-01/	
6099	'STAB2A'	F3	1	4.4	10	1.8
	1		1.41	1.00E-02	0.50000E-01/	
6101	'STAB2A'	B1	1	4.4	7.85	1.8
	0.785		1.41	1.00E-02	0.30000E-01/	
6102	'STAB2A'	B2	1	4.4	7.85	1.8
	0.785		1.41	1.00E-02	0.30000E-01/	
6110	'STAB2A'	B3	1	4.5	25	2
	5		1	1.00E-02	0.30000E-01/	
6176	'STAB2A'	E1	1	4.4	10	2
	0.785		1.5	1.10E-02	0.50000E-01/	
6177	'STAB2A'	E2	1	4.4	10	2
	0.785		1.5	1.10E-02	0.50000E-01/	
6264	'STAB2A'	G1	1	4.4	10	1.8
	1		1.41	1.00E-02	0.50000E-01/	
6265	'STAB2A'	G2	1	4.4	10	1.8
	1		1.41	1.00E-02	0.50000E-01/	
6371	'PSS2A'	G1	1	0	3	0
	4		1	2	0	0
	2		0	2	0.2	1

	0.4	0.1	15	0.20000	0	2.00E-02
	0.2	2.00E-02	5.00E-02	-0.50000E-01 /		
6372	'PSS2A'	G2	1	0	3	0
	4	1	2	0	0	
	2	0	2	0.2	1	
	0.4	0.1	15	0.20000	0	2.00E-02
	0.2	2.00E-02	5.00E-02	-0.50000E-01 /		
6413	'PSS2A'	G1	1	0	3	0
	4	1	2	0	0	
	2	0	2	0.2	1	
	0.4	0.1	15	0.20000	0	2.00E-02
	0.2	2.00E-02	5.00E-02	-0.50000E-01 /		
6414	'PSS2A'	G2	1	0	3	0
	4	1	2	0	0	
	2	0	2	0.2	1	
	0.4	0.1	15	0.20000	0	2.00E-02
	0.2	2.00E-02	5.00E-02	-0.50000E-01 /		
6461	'STAB2A'	G1	1	4.4	10	1.8
	1	1.41	1.00E-02	0.50000E-01 /		
6462	'STAB2A'	G2	1	4.4	10	1.8
	1	1.41	1.00E-02	0.50000E-01 /		

[MODELO DE RELEVADORES](#)

Interpretación:

I	LDSHxx'	LID	f1	t1	frac1	f2	t2	f3	t3	frac3	Tb
6028	'LDSHBL'	30	59.3	0.1	1	0	0	0	0	0	0.066/

I.10 LDSHBL, LDSHOW, LDSHZN, LDSHAR, LDSHAL

Underfrequency Load Shedding Model

DYRE Data Record:

I, 'LDSHxx', LID f₁, t₁, frac₁, f₂, t₂, frac₂, f₃, t₃, frac₃, T_b /

LID is an explicit load identifier or may be '*' for application to loads of any ID associated with the subsystem type.

Model suffix "xx"	"I" Description
BL	Bus number
OW	Owner number
ZN	Zone number
AR	Area number
AL	0

CONs	Value	Description
J		f ₁ , first load shedding point (Hz)
J+1		t ₁ , first point pickup time (sec)
J+2		frac ₁ , first fraction of load to be shed
J+3		f ₂ , second load shedding point (Hz)
J+4		t ₂ , second fraction pickup time (sec)
J+5		frac ₂ , second fraction of load to be shed
J+6		f ₃ , third load shedding point (Hz)
J+7		t ₃ , third point pickup time (sec)
J+8		frac ₃ , third fraction of load to be shed
J+9		T _b , breaker time (sec)

VARs	Description
L	First timer memory
L+1	Second timer memory
L+2	Third timer memory

Reserved ICONs	Description
N	First point delay flag
N+1	First point timeout flag
N+2	First timer status
N+3	Second point delay flag
N+4	Second point timeout flag
N+5	Second timer status
N+6	Third point delay flag
N+7	Third point timeout flag
N+8	Third timer status

I	LVSHxx'	LID	JBUS	V1	T1	F1	V2	T2	F2	V3	T3	F3	TB
6033	'LVSHBL'	47	0	0.913	0.5	1	0	0	0	0	0	0	0.066/

I.13 LVSHBL, LVSHOW, LVSHZN, LVSHAR, LVSHAL

Undervoltage Load Shedding Model

DYRE Data Record:

I, 'LVSHxx', LID, JBUS, V1, T1, F1, V2, T2, F2, V3, T3, F3, TB/

LID is an explicit load identifier or may be '*' for application to loads of any ID associated with the subsystem type.

Model suffix "xx"	"I" Description
BL	Bus number
OW	Owner number
ZN	Zone number
AR	Area number
AL	0

CONs	Value	Description	CONs	Value	Description
J		V1, first load shedding point (pu)	J+5		F2, second fraction of load to be shed
J+1		T1, first point pickup time (sec)	J+6		V3, third load shedding point (pu)
J+2		F1, first fraction of load to be shed	J+7		T3, third point pickup time (sec)
J+3		V2, second load shedding point (pu)	J+8		F3, third fraction of load to be shed
J+4		T2, second fraction pickup time (sec)	J+9		TB, breaker time (sec)

ICONs	Value	Description
M		JBUS, remote bus number where voltage is measured*
Reserved ICONs	Description	
N	First point delay flag	
N+1	First point timeout flag	
N+2	First timer status	
N+3	Second point delay flag	
N+4	Second point timeout flag	

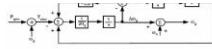
VARs	Description
L	First timer memory
L+1	Second timer memory
L+2	Third timer memory
Reserved ICONs	Description
N+5	Second timer status
N+6	Third point delay flag
N+7	Third point timeout flag
N+8	Third timer status

* Set JBUS = 0, if remote bus is same as the local bus to which the load is connected.

Información de Base de Datos:

6007	'LDSHBL' 1 0	59.3 0	0.1 0	0.49 0	0 0
	0.66000E-01/				
6007	'LDSHBL' 13 0	59.3 0	0.1 0	1 0	0 0
	0.66000E-01/				
6007	'LDSHBL' 2 0	58.75 0	0.1 0	0.429 0	0 0
	0.66000E-01/				
6007	'LDSHBL' 3 0	58.65 0	0.1 0	0.422 0	0 0
	0.66000E-01/				
6020	'LVSHBL' 61 0	0 0	0.913 0	0.9 0	1 0
	0.66000E-01/				
6020	'LVSHBL' 62 0	0 0	0.913 0	0.9 0	1 0
	0.66000E-01/				
6020	'LVSHBL' 63 0	0 0	0.913 0	0.9 0	1 0
	0.66000E-01/				
6020	'LVSHBL' 64 0	0 0	0.913 0	0.9 0	1 0
	0.66000E-01/				
6022	'LVSHBL' 65 0	0 0	0.913 0	0.9 0	1 0
	0.66000E-01/				
6022	'LDSHBL' 67 0	58.65 0	0.1 0	1 0	0 0
	0.66000E-01/				
6025	'LDSHBL' 56 0	58.4 0	0.1 0	0.288 0	0 0
	0.66000E-01/				
6026	'LDSHBL' 60 0	59.3 0	0.1 0	1 0	0 0
	0.66000E-01/				
6028	'LDSHBL' 28 0	58.65 0	0.1 0	1 0	0 0
	0.66000E-01/				
6028	'LDSHBL' 29 0	58.65 0	0.1 0	0.593 0	0 0
	0.66000E-01/				
6028	'LDSHBL' 30 0	58.65 0	0.1 0	1 0	0 0
	0.66000E-01/				
6028	'LDSHBL' 31 0	59.1 0	0.1 0	1 0	0 0
	0.66000E-01/				
6030	'LDSHBL' 32 0	58.65 0	0.1 0	1 0	0 0
	0.66000E-01/				
6030	'LDSHBL' 81 0	58.75 0	0.1 0	1 0	0 0
	0.66000E-01/				
6033	'LVSHBL' 47 0	0 0	0.913 0	0.5 0	1 0
	0.66000E-01/				
6033	'LVSHBL' 50 0	0 0	0.913 0	0.5 0	1 0
	0.66000E-01/				
6035	'LVSHBL' 52 0	0 0	0.913 0	0.5 0	1 0
	0.66000E-01/				
6035	'LDSHBL' 53 0	59.3 0	0.1 0	1 0	0 0
	0.66000E-01/				
6035	'LDSHBL' 54 0	58.65 0	0.1 0	1 0	0 0
	0.66000E-01/				
6035	'LVSHBL' 55 0	0 0	0.913 0	0.5 0	1 0
	0.66000E-01/				
6037	'LDSHBL' 36 0	58.75 0	0.1 0	1 0	0 0
	0.66000E-01/				
6039	'LDSHBL' 42 0	58.65 0	0.1 0	1 0	0 0
	0.66000E-01/				
6039	'LDSHBL' 45 0	58.75 0	0.1 0	1 0	0 0
	0.66000E-01/				
6041	'LVSHBL' 11 0	0 0	0.913 0	3 0	1 0
	0.66000E-01/				
6041	'LVSHBL' 15 0	0 0	0.913 0	3 0	1 0
	0.66000E-01/				

6041	'LVSHBL' 22	0	0.913	3	1
	0	0	0	0	0
	0	0.66000E-01/			
6043	'LVSHBL' 20	0	0.913	3	1
	0	0	0	0	0
	0	0.66000E-01/			
6045	'LDSHBL' 01	58.65	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6045	'LDSHBL' 03	58.4	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6058	'LDSHBL' 2	58.65	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6058	'LDSHBL' 6	58.4	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6062	'LDSHBL' 1	59.3	0.1	0.324	59.1
	0.1	0.387	0	0	0
	0.66000E-01/				
6066	'LDSHBL' 1	59.1	0.1	7.82E-02	0
	0	0	0	0	0
	0.66000E-01/				
6185	'LDSHBL' 80	58.4	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6185	'LDSHBL' 83	58.4	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6185	'LDSHBL' 84	59.1	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6185	'LDSHBL' 85	58.75	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6188	'LVSHBL' 58	0	0.913	0.5	1
	0	0	0	0	0
	0	0.66000E-01/			
6188	'LVSHBL' 60	0	0.913	0.5	1
	0	0	0	0	0
	0	0.66000E-01/			
6191	'LDSHBL' 94	58.4	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6194	'LDSHBL' 12	59.1	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6212	'LDSHBL' 1	58.65	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6212	'LDSHBL' 5	58.65	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6214	'LDSHBL' 4	58.65	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6220	'LDSHBL' 3	58.65	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6220	'LDSHBL' 8	59.3	0.1	1	0
	0	0	0	0	0
	0.66000E-01/				
6411	'LDSHBL' 1	59.3	2	0.1	59.1
	0.1	0.35	58.45	0.1	0.25
	0.0000 /				



Three-phase voltage source model

Información de Base de Datos

6434	WTBGI	G1	0	0	0.1	2.5	/
6435	WTBGI	G1	0	0	0.1	2.5	/
6437	WTBGI	G1	0	0	0.1	2.5	/
6438	WTBGI	G1	0	0	0.1	2.5	/
6433	WTBRI G1	0 - 5	1	0.032	6.033	71	/
			0.15	0.032	5.996	5.000e-02	
			0.3	0.032	5.1	1.26e-02	
			-0.456	1.1	5.000e-02	0.45	-0.45
			0.5	0.032	5.000	0.12	0
			-0.5	0.4	5.000e-02	5.000e-02	0
			0.158	0.032	5.000e-02	0.12	0.74
6435	WTBRI G1	0 - 5	1	0.034	6.035	71	/
			0.15	0.034	5.996	5.000e-02	
			0.3	0.034	5.1	1.26e-02	
			-0.456	1.1	5.000e-02	0.45	-0.45
			0.5	0.034	5.000	0.12	0
			-0.5	0.4	5.000e-02	5.000e-02	0
			0.158	0.034	5.000e-02	0.12	0.74
6437	WTBRI G1	0 - 5	1	0.036	6.037	71	/
			0.15	0.036	5.996	5.000e-02	
			0.3	0.036	5.1	1.26e-02	
			-0.456	1.1	5.000e-02	0.45	-0.45
			0.5	0.036	5.000	0.12	0
			-0.5	0.4	5.000e-02	5.000e-02	0
			0.158	0.036	5.000e-02	0.12	0.74
6438	WTBRI G1	0 - 5	1	0.038	6.038	71	/
			0.15	0.038	5.996	5.000e-02	
			0.3	0.038	5.1	1.26e-02	
			-0.456	1.1	5.000e-02	0.45	-0.45
			0.5	0.038	5.000	0.12	0
			-0.5	0.4	5.000e-02	5.000e-02	0
			0.158	0.038	5.000e-02	0.12	0.74
6433	WTBII G1	0.15	0	0	5.000e-02	21.98	/
6435	WTBII G1	0.15	0	0	5.000e-02	21.98	/
6437	WTBII G1	0.15	0	0	5.000e-02	21.98	/
6438	WTBII G1	0.15	0	0	5.000e-02	21.98	/
6433	WTBPI G1	0	27	25	3	30	/
6435	WTBPI G1	0	27	25	3	30	/
6437	WTBPI G1	0	27	25	3	30	/
6438	WTBPI G1	0	27	25	3	30	/
6433	WTBPI G1	0	27	25	3	30	/

[MODELO DE SVC](#)

Interpretación:

BUS	CSVGN4'	I	IB	K	T ₁	T ₂	T ₃	T ₄	T ₅	R _{MIN}	V _{MAX}	V _{MIN}	C _{BASE}	V _{Ov/}
6810	'CSVGN4'	1	6008	150	0	0	0.45	0	0.03	0.001	1	-1	300	0.10/

E.7 CSVGN4

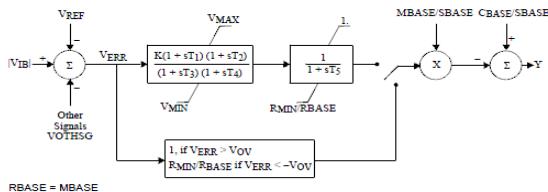
Static Shunt Compensator

This device is located at system bus #_____ IBUS.
 machine #_____ I.
 This model uses CONs starting with #_____ J.
 and STATEs starting with #_____ K.
 and VAR #_____ L.
 and ICONs starting with #_____ M.
 The reactor Mvar base = _____ MBASE

CONs	#	Value	Description	CONs	#	Value	Description
J		K		J+6			R _{MIN} (reactor minimum Mvar)
J+1		T ₁		J+7			V _{MAX}
J+2		T ₂		J+8			V _{MIN}
J+3		T ₃ (>0)		J+9			C _{BASE} (capacitor Mvar)
J+4		T ₄		J+10			V _{Ov} (override voltage)
J+5		T ₅					

STATEs	#	Description	VARs	#	Description
K		First regulator	L		Y (model output)
K+1		Second regulator	ICONs	#	Description
K+2		Thyristor	M	X	[IB] remote bus to regulate or zero to regulate terminal voltage
			M+1		Memory

BUS, 'CSVGN4', I, IB, K, T₁, T₂, T₃, T₄, T₅, R_{MIN}, V_{MAX}, V_{MIN}, C_{BASE}, V_{Ov/}



R_{BASE} = M_{BASE}

Información de Base de Datos:

6998	'CSVGN4'	C1	6008	150	0	0
	0.45		0	3.00E-02	1.00E-03	1
	-1		500	0.10000	/	
6999	'CSVGN4'	C1	6003	150	0	0
	0.45		0	3.00E-02	1.00E-03	1
	-1		500	0.10000	/	