Table 2.3 Calculation Results by Y-method

(Excitation System Model : LAT = 1, Load Characteristic : Constant Current [NLT = 2])

Branch, Fault Location	Daytime Condition		Nighttime Condition	
	1 cct. 3LG-O	2 cct. 3LG-O	1 cct. 3LG-O	2 cct. 3LG-O
11 (Point A)	(Fig.) 1st [G1]		Stable	
12	Stable	1st [G1]	Stable	Stable
15		N th (3 sec) [G7]		Stable
18	N th (5 sec) [G10, etc.]	1st [G10, etc.]	Stable	Stable
19	N th (5 sec) [G10, etc.]	1st [G10, etc.]	Stable	Stable
20	Stable	Stable	Stable	Stable
22		N th (7 sec) [G4, etc.]		Stable
24	Stable	N th (3 sec) [G7, etc.]	Stable	Stable
28		N th (3 sec) [G6]	1st [G7, etc.]	1st [G7, etc.]
30		Stable	N th (4 sec) [G7, etc.]	1st [G7, etc.]
31		Stable		Stable
33 (Point B)	(Add.) N th (6 sec) [G6]	1st [G6]	Stable	N th (2 sec) [G7, etc.]
35	Stable	N th [G7, etc.]	1st [G7, etc.]	1st [G7, etc.]
36 (Point C)	(Fig.) Sustained Swing		(Fig.) Stable	

Legend :

1st : Step-out in 1st internal angle swing after the fault is cleared.
N th : Step-out in several swing after the fault is cleared.
(Fig.) : In this case, the calculation results are shown in graph figures.
(Add.) : In this case, the excitation system model (LAT) is changed as additional case.
(? sec) : Approximate time that any generator is step-out.
[G?] : Generator(s) No. that is step-out.

Note1 : Fault Duration Time is 70 [ms] in all cases.
Note2 : The "Step-Out" is judged when the generator internal angle is more than 360 [deg] from the reference generator that is G3 in daytime condition, G6 in nighttime condition.