

Table 1 - Transmission Line Repair Materials for Earthquake Damage

Diam (in)	Owner	Pipe Material	Repairs Grouped by Diam and Jt	Pipe Segments Needed	Connections / Joint Repair Number	Total Pipe segments	Total Pipe (ft) (assume 20'/segment)	Total Joint Repair	Repair Pipe On Hand (ft)	Other Repair Materials On Hand
96	S	Concrete	1.75	2	4					
96	E	Concrete Cylinder	0.20	0	2					
96	Total					2	40	6		
92	S	Steel	2.16	3	6	3	60	6		
90	T	Steel	0.11	0	0	0	0	0		
89	S								105	
84	S	Concrete	0.29	1	2	1	20	2		
81	S	Steel	0.64	1	2	1	20	2		
78	S	Welded Steel	3.55	4	8	4	80	8		
78	T	Steel	0.27	1	2				32	Pipe 80" D
78	Total					5	100	10		
76	S								120	
75	S	Steel	1.48	2	4	2	40	4		
72	T	Steel	1.37	1	3	1	20	3		
66	S	Concrete Cylinder	0.92	1	2					
66	S	Lock Bar Steel	1.34	1	2					
66	S	Riveted Steel	5.38	6	12					
66	S	Welded Steel	1.26	1	16				260	
66	Total					9	180	32		
64	T	LBS	0.09	0	0	0	0	0		
63	T	CCC	1.10	1	2					
63	T	Steel	0.04	0	0					
63	Total					1	20	2		
60	S	Concrete	0.35	0	1					
60	S	Concrete Cylinder	12.33	13	26					
60	E	Concrete Cylinder	1.10	1	4					
60	T	Gunnite	0.00	0	0					
60	S	Welded Steel	0.40	0	1				300	
60	T	Steel	5.27	4	10					
60	Total					5	100	15		
58	T	CCC/SCC	5.90	5	12					
58	T	Steel	1.67	2	5					
58	Total					7	140	17		
54	S	Concrete Cylinder	0.27	0	2					
54	T	CCC/SCC	8.50	7	16					
54	S	Ductile Iron	0.32	1	2					
54	S	Lock Bar Steel	3.13	3	6					
54	S	Welded Steel	3.20	4	14				260	
54	T	Steel	0.08	0	0				56	
54	Total					15	300	40		
52	E	Concrete Cylinder	0.70	0	4					

Diam (in)	Owner	Pipe Material	Repairs Grouped by Diam and Jt	Pipe Segments Needed	Connections / Joint Repair Number	Total Pipe segments	Total Pipe (ft) (assume 20'/segment)	Total Joint Repair	Repair Pipe On Hand (ft)	Other Repair Materials On Hand
52	T	CCC	1.70	2	5					
52	E	Steel	0.40	0	2					7-1/2 Butt Strap Sets
52	T	Steel	0.96	1	3				46	
52	Total					3	60	14		
51.5	S	Welded Steel	2.48	3	6	3	60	6		
51	S	Concrete Cylinder	0.36	0	2					
51	E	Concrete Cylinder	0.50	0	2					
51	T	CCC	0.90	1	3					
51	E	Ductile Iron	1.00	1	4					
51	E	Steel	5.90	2	12				64	
51	E	Steel	1.10	1	4				344	
51	T	Steel	0.03	0						
51	Total					5	100	27		
50	E	Steel	0.20	1	2	1	20	2		
48	S	Concrete Cylinder	0.34	0	2					
48	E	Concrete Cylinder	3.00	2	6					
48	T	SCC	2.00	2	3					
48	S	Lock Bar Steel	2.42	3	6					
48	S	Welded Steel	0.95	3	8				240	(50")
48	E	Steel	2.30	2	6				105	3 Butt Strap Sets
48	T	Steel	7.25	6	14					
48	E	Steel	8.40	5	18				80	
48	Total					23	460	63		
46	S	Steel	0.40	1	2	1	20	2		
42	S	Concrete Cylinder	0.15	0	2					
42	T	CCC	6.40	5	12					
42	S	Welded Steel	1.53	2	4				160	(44")
42	T	Steel	1.65	2	5					
42	Total					9	180	23		
39	T	Steel	0.41	1	3	1	20	3		
38	S								91	
36	S	Concrete Cylinder	4.77	5	10				18	(DIP)
36	E	Concrete Cylinder	0.50	0	2					
36	T	CC	28.90	23	54					
36	E	Steel	0.80	1	2					
36	T	Steel	1.65	2	3					
36	Total					31	620	71		
36 DIP	E	Ductile Iron	16.60	9	34	9	180	34		
34	T	Steel	1.12	1	3	1	20	3		

Diam (in)	Owner	Pipe Material	Repairs Grouped by Diam and Jt	Pipe Segments Needed	Connections / Joint Repair Number	Total Pipe segments	Total Pipe (ft) (assume 20'/segment)	Total Joint Repair	Repair Pipe On Hand (ft)	Other Repair Materials On Hand
32	T	Steel	0.84	1	3	1	20	3		
32	S	Steel							249	
30	S	Concrete Cylinder	0.26	0	2					
30	E	Concrete Cylinder	0.60	0	2					
30	S	Steel	1.39	2	4					
30	E	Steel	0.40	0	2					2 sleeves
30	T	Steel	1.14	1	3				217	
30	Total					3	60	13		
24	S	Concrete Cylinder	0.42	1	2					
24	T	Steel	0.26	1	2				1250	
24	E	Steel	0.00	0	0					18 sleeves, 2 Butt Strap sets, 3 Manway Flanfes
24	Total					2	40	4		
24	C	Ductile Iron		2	7				60	2 sleeves
24	T	Ductile Iron	0.07	0	0					
24 DIP	Total					2	40	7		
20	S	Cast Iron	1.24	2	4					
20	T	Cast Iron	0.24	0	1					
20	Total					2	40	5		
18	T	Steel	0.05	0	0	0	0	0		
		Total	179.14	162	446		3060	427	3465	

Legend

	Everett
	SPU
	Tacoma
	Cascade

	2 utilities using this diameter
	3 utilities using this diameter
	DIP Ductile iron pipe (all other repair materials steel)