PLS-CADD Version 5.07T 2:43:50 PM Monday, March 25, 2002
Power Line Systems, Inc. - Portland
Project Name: 'c:\pls\pls_cadd\examples\projects\creep.LOA'
Criteria notes:
  NESC Heavy per Rule 250B, Page 148
  80 MPH Extreme Wind Loading per Rule 250C, Page 148
  Grade B Construction "Method A" per Table 253-1, Page 155 and Table 261-1A, Page 163
  Tension Limits per Rule 261H2, Page 161
  Insulator Strength Reduction per Rule 277, Page 170 Should be applied to Insulator Strengths
  1997 NESC C2-1997 Criteria File for PLS-CADD
  Created May 17, 2001

Ruling Span Sag Tension Report

Section #7 '2:Back'
Cable 'c:\wires\nonlinear\acsr\linnet_acsr.wir', Ruling span (ft) 1000
Sagging data: Catenary (ft) 9092.43 Condition I Temperature (deg F) 60
Note: Temperature and condition above are program supplied defaults used for automatic sagging.
Weather case for final after creep 60 Deg F
Weather case for final after load Extreme Ice

WEATHER CASE	CABLE LOAD	R.S. INITIAL COND.						R.S. FINAL COND. AFTER CREEP						R.S. FINAL COND. AFTER LOAD					
# DESCRIPTION	HOR. LOAD (lbs/ft)	VERT LOAD	RES. LOAD	MAX. TENS. (lbs)	HORI. TENS. (lbs)	% UL	C (ft)	R.S. SAG (ft)	MAX. TENS. (lbs)	HORI. TENS. (lbs)	% UL	C (ft)	R.S. SAG (ft)	MAX. TENS. (lbs)	HORI. TENS. (lbs)	% UL	C (ft)	R.S. SAG (ft)
1 NESC Heavy	0.57	1.22	1.65	7940	7897	56	4789	26.13	7940	7897	56	4789	26.13	7127	7079	51	4293	29.15
2 Extreme Wind	1.54	0.46	1.60	7349	7305	52	4556	27.46	7303	7259	52	4527	27.64	6389	6338	45	3953	31.66
3 Extreme Ice	0.00	2.60	2.60	9720	9632	69	3702	33.81	9720	9632	69	3702	33.81	9720	9632	69	3702	33.81
4 Uplift	0.00	0.46	0.46	5133	5128	36	11085	11.28	4264	4258	30	9204	13.58	2978	2969	21	6417	19.49
5 Maximum Operati	0.00	0.46	0.46	2385	2374	17	5132	24.37	2158	2145	15	4638	26.98	2050	2037	15	4404	28.41
6 NESC Blowout 6P	0.36	0.46	0.59	4613	4604	33	7855	15.92	3821	3810	27	6500	19.24	2971	2956	21	5043	24.81
7 No Wind (SWING1	0.00	0.46	0.46	4213	4206	30	9092	13.75	3292	3284	23	7098	17.62	2538	2527	18	5463	22.90
8 Medium Wind (SW	0.00	0.46	0.46	4213	4206	30	9092	13.75	3292	3284	23	7098	17.62	2538	2527	18	5462	22.90
9 High Wind (SWIN	0.02	0.46	0.46	4213	4206	30	9087	13.76	3294	3286	23	7100	17.61	2539	2528	18	5462	22.90
10 GALLOPING (SWIN	0.29	1.22	1.25	6772	6743	48	5375	23.27	6587	6557	47	5227	23.93	5582	5547	40	4422	28.30
11 GALLOPING (SAG)	0.00	1.22	1.22	6691	6663	47	5456	22.93	6479	6451	46	5282	23.68	5475	5441	39	4455	28.08
12 -20 Deg F	0.00	0.46	0.46	5446	5441	39	11763	10.63	4679	4674	33	10103	12.37	3207	3198	23	6914	18.09
13 0 Deg F	0.00	0.46	0.46	5133	5128	36	11085	11.28	4264	4258	30	9204	13.58	2978	2969	21	6417	19.49
14 30 Deg F	0.00	0.46	0.46	4663	4657	33	10067	12.42	3729	3721	26	8044	15.54	2692	2682	19	5797	21.58
15 32 Deg F	0.00	1.22	1.22	6691	6663	47	5456	22.93	6479	6451	46	5282	23.68	5475	5441	39	4455	28.08
16 60 Deg F	0.00	0.46	0.46	4213	4206	30	9092	13.75	3292	3284	23	7098	17.62	2538	2527	18	5463	22.90
17 90 Deg F	0.00	0.46	0.46	3794	3786	27	8185	15.28	2943	2934	21	6343	19.72	2442	2431	17	5254	23.81
18 120 Deg F	0.00	0.46	0.46	3418	3410	24	7372	16.96	2664	2654	19	5737	21.80	2353	2341	17	5061	24.72
19 167 Deg F	0.00	0.46	0.46	2930	2921	21	6313	19.81	2352	2340	17	5059	24.73	2224	2212	16	4781	26.17
20 212 Deg F	0.00	0.46	0.46	2567	2557	18	5527	22.63	2229	2217	16	4792	26.11	2113	2100	15	4540	27.56

	WEATHER CASE DESCRIPTION	INITIAL CONDITION HORIZ. TENSION (lbs)			FINAL AFTER CREEP HORIZ. TENSION (lbs)			FINAL AFTER LOAD HORIZ. TENSION (lbs)		
		TOTAL	CORE	OUTER	TOTAL	CORE	OUTER	TOTAL	CORE	OUTER
1	NESC Heavy	7897	3795	4102	7897	3795	4102	7079	4032	3047
2	Extreme Wind	7305	3592	3713	7259	3658	3600	6338	4055	2284
3	Extreme Ice	9632	4965	4666	9632	4965	4666	9632	4965	4666
4	Uplift	5128	2189	2939	4258	2266	1992	2969	2530	439
5	Maximum Operati	2374	1840	534	2145	2145	0	2037	2037	0
6	NESC Blowout 6P	4604	2132	2472	3810	2397	1413	2956	2819	137
7	No Wind (SWING1	4206	1934	2272	3284	2205	1079	2527	2527	0
8	Medium Wind (SW	4206	1934	2272	3284	2205	1079	2527	2527	0
9	High Wind (SWIN	4206	1934	2272	3286	2205	1081	2528	2528	0
10	GALLOPING (SWIN	6743	3186	3557	6557	3264	3292	5547	3629	1918
11	GALLOPING (SAG)	6663	3140	3523	6451	3226	3225	5441	3590	1851
12	-20 Deg F	5441	2291	3150	4674	2320	2354	3198	2516	683
13	0 Deg F	5128	2189	2939	4258	2266	1992	2969	2530	439
14	30 Deg F	4657	2049	2608	3721	2217	1504	2682	2572	110
15	32 Deg F	6663	3140	3523	6451	3226	3225	5441	3590	1851
16	60 Deg F	4206	1934	2272	3284	2205	1079	2527	2527	0
17	90 Deg F	3786	1847	1940	2934	2224	710	2431	2431	0
18	120 Deg F	3410	1790	1620	2654	2268	385	2341	2341	0
19	167 Deg F	2921	1763	1157	2340	2340	0	2212	2212	0
20	212 Deg F	2557	1796	760	2217	2217	0	2100	2100	0