Attachment J
Primary Overhead Conductor Loading Guideline

PRIMARY OVERHEAD CONDUCTOR
LOADING GUIDELINE

CONDUCTOR SIZE	CODE	SUMMER (AMPS)			WINTER (AMPS)		
		DESIGN	MAX	EMERGENCY	DESIGN	MAX	EMERGENCY
1113 AAC	Marigold	520	830	970	930	1175	1315
954 AAC	Magnolia	480	760	880	850	1070	1190
795 AAC	Arbutus	430	680	790	760	960	1070
715.5 AAC	Violet	410	640	740	710	900	1000
636 AAC	Orchid	380	600	690	660	830	930
477 AAC	Cosmos	330	500	580	560	690	770
397.5 AAC	Canna	290	450	520	500	620	690
266.8 AAC	Daisy	230	350	400	390	480	530
4/0 AAAC	Alliance	210	310	350	340	420	470
1/0 AAAC	Azusa	140	200	230	220	270	300
#4 AAAC	Alton	80	110	130	125	150	170
1272 ACSR	Pheasant	570	920	1080	1038	1310	1470
954 ACSR	Rail	480	770	900	860	1080	1210
795 ACSR	Drake	440	700	820	790	990	1100
203 ACSR	Brahma	220	330	380	370	460	510
4/0 ACSR	Penguin	210	310	350	340	420	470
1/0 ACSR	Raven	140	200	230	220	270	300
#2 ACSR	Sparrow	110	150	170	170	210	230
#4 ACSR	Swan	80	110	130	130	150	170
#6 ACSR	Turkey	60	85	95	90	115	125
4/0 CU	(7-Strand)	260	380	440	420	520	580
2/0 CU	(7-Strand)	200	280	330	320	390	430
1/0 CU	(7-Strand)	170	250	290	270	340	380
#1 CU	(7-Strand)	150	210	240	240	290	320
#2 CU	(7-Strand)	130	180	210	200	250	280
#4 CU	(7-Strand)	100	140	160	150	180	200
#6 CU	(1-Strand)	70	100	120	110	140	160

The ampacity table above is calculated by EPRI's DYNAMP computer program using the House and Tuttle Method under the following parameters:

1. Design summer conductor temperature is 54^{o} C with a 35^{o} C ambient.
2. Maximum summer conductor temperature is 75^{o} C with a 40^{o} C ambient.
3. Emergency summer conductor temperature is 90^{o} C with a 45^{o} C ambient.
4. Summer peak loadings are based on June 15th @ 1500 hr.
5. Design winter conductor temperature is 54^{o} C with a 15^{o} C ambient.
6. Maximum winter conductor temperature is 75^{o} C with a 15^{o} C ambient.
7. Emergency winter conductor temperature is 90^{o} C with a 15^{o} C ambient.
8. Winter peak loadings are based on February 15th @ 1500 hr.
9. Wind velocity is two feet per second, normal to conductor.
10. Latitude of 38^{o} and longitude of 120^{o}.
11. Conductor inclination and azimuth of 0^{o}.
12. An elevation above sea level of 0 feet.
13. Absorptivity and emissivity of 0.5.

Note: The above ratings are rounded off for easier application. Additional conductor sags must be considered before design loading limits are to be exceeded. Loadings beyond design ratings may result in a reduction in safety clearances as required by code for lines built with minimum clearances.