

2021 Loss Factors Effective 1 Jan 2021 (2020-11-30)

Document: Workbook Showing Calculations From Hourly Raw Loss Factors to Final Loss Factors for 2021, in Accordance With Subsection 3(2)(f) of Section 501.10 of ISO Rules, Transmission Loss Factors
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Location (MPID)	Facility Name	Area Name	Number	PSS/E Bus	Final Loss Factor
0000001511	FortisAlberta Reversing POD - Fort Macleod (15S)	Fort Macleod	53	4237	12.00%
0000006511	FortisAlberta Reversing POD - High River (65S)	High River	46	4242	2.84%
0000006711	FortisAlberta Reversing POD - Stirling (67S)	Glenwood	55	4280	12.00%
0000012111	FortisAlberta Reversing POD - Brooks (121S)	Brooks	47	3256	2.84%
0000013711	FortisAlberta Reversing POD - Sedgewick (137S)	Wainwright	32	4078	2.84%
0000015811	FortisAlberta Reversing POD - Vauxhall (158S)	Vauxhall	52	553274	(0.63%)
0000016301	FortisAlberta DOS - Plains Midstream Canada (163S)	Empress	48	262	8.54%
0000019811	FortisAlberta Reversing POD - Blackfalds (198S)	Red Deer	35	3113	2.84%
0000021411	FortisAlberta Reversing POD - Innisfail (214S)	Didsbury	39	557120	(12.00%)
0000022911	FortisAlberta Reversing POD - Glenwood (229S)	Glenwood	55	4245	12.00%
0000025411	FortisAlberta Reversing POD - Coaldale (254S)	Lethbridge	54	4690	(12.00%)
0000025611	FortisAlberta Reversing POD - Harmattan (256S)	Didsbury	39	124	1.07%
0000025711	FortisAlberta Reversing POD - Hull (257S)	Vauxhall	52	2401, 552402	(1.17%)
0000027711	FortisAlberta Reversing POD - Hayter (277S)	Provost	37	220	(1.43%)
0000033111	FortisAlberta Reversing POD - Ponoka (331S)	Wetaskiwin	31	4090	(5.55%)
0000034911	FortisAlberta Reversing POD - Stavely (349S)	Stavely	49	4235	(2.57%)
0000038511	FortisAlberta Reversing POD - Spring Coulee (385S)	Glenwood	55	4246	12.00%
0000039611	FortisAlberta Reversing POD - Pincher Creek (396S)	Fort Macleod	53	4224	12.00%
0000045411	FortisAlberta Reversing POD - Buck Lake (454S)	Drayton Valley	30	4080	2.84%
0000065911	FortisAlberta Reversing POD - Pegasus (659S)	Swan Hills	26	325	(1.22%)
0000079301	FortisAlberta DOS - Cochrane EV Partnership (793S)	Seebe	44	191	2.84%
0000089511	FortisAlberta Reversing POD - Suffield (895S)	Medicine Hat	4	3270	1.83%
311S033N	ATCO Electric Reversing POD - Elmsworth (731S)	Grande Prairie	20	19134	(11.98%)
312S008N	ATCO Electric Reversing POD - Rycroft (730S)	Grande Prairie	20	19100	(12.00%)
312S025N	ATCO Electric Reversing POD - Mowat (2033S)	Grande Prairie	20	19116	(4.22%)
321S009N	ATCO Electric Reversing POD - Carmon (830S)	Peace River	19	19083	(2.89%)
321S033	ATCO Electric DOS - Daishowa-Marubeni (839S)	Peace River	19	1088	12.00%
325S009N	ATCO Electric Reversing POD - Hotchkiss (788S)	Peace River	19	19050	1.01%
372S025N	ATCO Electric Reversing POD - Lindbergh (969S)	Cold Lake	28	1444	(0.40%)
AFG1TX	APF Athabasca	Athabasca	27	392	(4.31%)
AKE1	McBride Lake Wind Facility	Fort Macleod	53	901	7.12%
ANC1	Alberta Newsprint	Swan Hills	26	298	(1.22%)
ARD1	Ardenville Wind Facility	Fort Macleod	53	739	5.88%
BAR	Barrier Hydro Facility	Seebe	44	216	(0.12%)
BCR2	Bear Creek #2	Grande Prairie	20	1142	(8.94%)
BCRK	Bear Creek #1	Grande Prairie	20	1142	(10.48%)
BIG	Bighorn Hydro Facility	Abraham Lake	34	103	2.06%
BPW	Bears paw Hydro Facility	Seebe	44	184	0.08%
BR4	Battle River #4	Alliance	36	1491	2.66%
BR5	Battle River #5	Alliance	36	1469	2.94%
BRA	Brazeau Hydro Facility	Drayton Valley	30	153	1.66%
BSR1	Blackspring Ridge Wind Facility	Stavely	49	736	5.10%
BTR1	Blue Trail Wind Facility	Fort Macleod	53	328	5.85%
CAS	Cascade Hydro Facility	Seebe	44	175	(3.11%)
CES1/CES2	Calgary Energy Centre	Calgary	6	187	1.63%
CHIN	Chin Chute Hydro Facility	Lethbridge	54	406	3.33%
CL01	Cenovus Christina Lake Industrial System	Fort McMurray	25	879	4.17%
CMH1	City of Medicine Hat	Medicine Hat	4	976	4.13%
CNR5	CNRL Horizon Industrial System	Fort McMurray	25	1263	5.52%
CR1	Castle River #1 Wind Facility	Fort Macleod	53	234	6.20%
CRE3	Cowley Ridge Wind Facility	Fort Macleod	53	264	9.12%
CRR1	Castle Rock Ridge Wind Facility	Fort Macleod	53	221	6.25%
CRR2	Castle Rock Ridge Phase 2 Wind Facility	Fort Macleod	53	221	6.89%
CRS1	Crossfield Energy Centre #1	Airdrie	57	503	2.88%
CRS2	Crossfield Energy Centre #2	Airdrie	57	503	2.56%
CRS3	Crossfield Energy Centre #3	Airdrie	57	503	2.83%

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DAI1	Daishowa-Marubeni	Peace River	19	1089	(4.96%)
DOWGEN15M	Dow Hydrocarbon Industrial Complex	Fort Saskatchewan	33	61	4.06%
DRW1	Drywood #1	Glenwood	55	4226	4.94%
EAGL	Whitecourt Power	Swan Hills	26	410	(2.26%)
EC01	Cavalier	Strathmore	45	340	0.82%
EC04	Foster Creek Industrial System	Cold Lake	28	1301	5.47%
EGC1	Shepard	Calgary	6	772	2.38%
ENC1	Clover Bar #1	Edmonton	60	516	3.21%
ENC2	Clover Bar #2	Edmonton	60	516	3.19%
ENC3	Clover Bar #3	Edmonton	60	516	3.15%
FH1	Fort Hills Industrial System	Fort McMurray	25	1612	4.17%
FNG1	Fort Nelson	Rainbow Lake	17	20000	5.63%
GHO	Ghost Hydro Facility	Seebe	44	180	(0.60%)
GN1	Genesee #1	Lake Wabamun	40	525	4.02%
GN2	Genesee #2	Lake Wabamun	40	525	3.97%
GN3	Genesee #3	Lake Wabamun	40	525	3.89%
GPEC	Grande Prairie EcoPower	Grande Prairie	20	1101	(9.25%)
GWW1	Soderglen Wind Facility	Fort Macleod	53	358	5.96%
HAL1	Halkirk Wind Facility	Hanna	42	1435	2.73%
HRM	H. R. Milner	Grande Cache	22	1147	(6.91%)
HSH	Horseshoe Hydro Facility	Seebe	44	171	(0.36%)
IEW1	Summerview 1 Wind Facility	Fort Macleod	53	336	6.79%
IEW2	Summerview 2 Wind Facility	Fort Macleod	53	336	7.16%
INT	Interlakes Hydro Facility	Seebe	44	376	3.18%
IOR1	Cold Lake Industrial System	Cold Lake	28	1303	1.57%
IOR3	Kearl Oil Sands Industrial System	Fort McMurray	25	1610	2.84%
IOR4	Strathcona Refinery Industrial System	Edmonton	60	3069, 4066	2.84%
KAN	Kananaskis Hydro Facility	Seebe	44	193	(0.29%)
KH1	Keephills #1	Lake Wabamun	40	420	4.72%
KH2	Keephills #2	Lake Wabamun	40	420	4.74%
KH3	Keephills #3	Lake Wabamun	40	510	3.86%
KHW1	Kettles Hill Wind Facility	Fort Macleod	53	402	6.34%
MEG1	MEG Christina Lake Industrial System	Fort McMurray	25	405	3.31%
MKR1	Muskeg River Industrial System	Fort McMurray	25	1236	5.02%
MKRC	MacKay River Industrial System	Fort McMurray	25	1274	4.32%
NEP1	Ghost Pine Wind Facility	Hanna	42	603	1.33%
NOVAGEN15M	Joffre Industrial System	Red Deer	35	383	1.02%
NPP1	Northern Prairie Power Project	Grande Prairie	20	1118	(12.00%)
NRG3	NRGreen	Swan Hills	26	1674	(4.69%)
NX01	Nexen Balzac	Calgary	6	198	1.00%
NX02	Nexen Long Lake Industrial System	Fort McMurray	25	1241	4.68%
OMRH	Oldman River Hydro Facility	Fort Macleod	53	230	4.27%
OWF1	Oldman 2 Wind Facility	Fort Macleod	53	543	6.69%
PH1	Poplar Hill #1	Grande Prairie	20	1118	(11.42%)
PMB1	West Pembina	Drayton Valley	30	4215	(12.00%)
POC	Pocaterra Hydro Facility	Seebe	44	329	1.30%
PR1	Primrose Industrial System	Cold Lake	28	800	8.50%
Proj_1647	Heartland Petrochemical Complex Industrial System	Fort Saskatchewan	33	—	3.40%
Proj_1812	Forty Mile Granlea Wind Facility	Medicine Hat	4	—	4.52%
Proj_1837	FortisAlberta Reversing POD - Tilley (498S)	Brooks	47	3275	2.53%
Proj_1840	FortisAlberta Reversing POD - Jenner (275S)	Empress	48	—	3.61%
Proj_1849	FortisAlberta Reversing POD - Burdett (368S)	Vauxhall	52	2269	2.65%
Proj_1879-1	Claresholm Solar A Facility	Stavely	49	99004	5.22%
Proj_1879-2	Claresholm Solar B Facility *	Stavely	49	99004	5.22%
Proj_2009	Travers Solar Facility	Stavely	49	—	3.11%
Proj_2041	Windrise Wind Facility	Fort Macleod	53	—	5.23%

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Proj_2086	FortisAlberta Reversing POD - Brooks (121S-83L)	Brooks	47	3256	2.27%
Proj_2092	FortisAlberta Reversing POD - Brooks (121S-257LE)	Brooks	47	4256	2.26%
Proj_2171	FortisAlberta Reversing POD - Westfield (107S)	Vauxhall	52	4277	2.13%
Proj_2216	FortisAlberta Reversing POD - Chappice Lake (649S)	Medicine Hat	4	4320	4.33%
Proj_2241	FortisAlberta Reversing POD - Burdett (368S)	Vauxhall	52	2269	2.49%
RB5	Rainbow #5	Rainbow Lake	17	83	2.29%
RIV1	Riverview Wind Facility	Fort Macleod	53	69221	6.19%
RUN	Rundle Hydro Facility	Seebe	44	195	(1.43%)
RYMD	Raymond Reservoir Hydro Facility	Glenwood	55	413	5.52%
SCL1	Syncrude Industrial System	Fort McMurray	25	1200	5.38%
SCR1	Suncor Industrial System	Fort McMurray	25	1200	3.46%
SCR2	Magrath Wind Facility	Glenwood	55	251	5.52%
SCR3	Chin Chute Wind Facility	Lethbridge	54	389	4.32%
SCR4	Wintering Hills Wind Facility	Sheerness	43	759	3.79%
SCTG	Scotford Industrial System	Fort Saskatchewan	33	43	3.40%
SD4	Sundance #4	Lake Wabamun	40	135	0.57%
SD5	Sundance #5	Lake Wabamun	40	135	2.84%
SD6	Sundance #6	Lake Wabamun	40	135	0.33%
SH1	Sheerness #1	Sheerness	43	1481	4.72%
SH2	Sheerness #2	Sheerness	43	1486	4.70%
SHCG	Shell Caroline	Caroline	38	370	12.00%
SLP1	Slave Lake Pulp	High Prairie	21	1230	(8.82%)
SPR	Spray Hydro Facility	Seebe	44	310	(1.81%)
SUM1	Summerview Energy Storage Facility	Fort Macleod	53	336	3.76%
TAB1	Taber Wind Facility	Vauxhall	52	343	2.23%
TAY1	Taylor Hydro Facility	Glenwood	55	693	4.75%
TC01	Carseland Industrial System	Strathmore	45	5251	1.95%
TC02	Redwater Industrial System	Fort Saskatchewan	33	50	3.34%
THS	Three Sisters Hydro Plant	Seebe	44	379	2.84%
VVW1	Valleyview #1	Valleyview	23	1172	(4.25%)
VVW2	Valleyview #2	Valleyview	23	1172	(4.22%)
WEY1	Weyerhaeuser	Grande Prairie	20	1140	(6.22%)
WHT1	Whitla Wind Facility	Medicine Hat	4	60990	4.25%
WST1	Westlock Power Plant	Athabasca/Lac La Biche	27	14	(0.84%)
BCHEXP	Alberta-BC Interite - Export	WSCC	15	1520	0.87%
BCHIMP	Alberta-BC Interite - Import	WSCC	15	1520	3.56%
MTEXP	Alberta-Montana Intertie - Export	Glenwood	55	80000	—
120SIMP	Alberta-Montana Intertie - Import	Glenwood	55	80000	5.12%
SPCEXP	Alberta-Saskatchewan Intertie - Export	Empress	48	1473	2.26%
SPCIMP	Alberta-Saskatchewan Intertie - Import	Empress	48	1473	4.32%

* When 2021 loss factors were being determined, Project 1879 was configured as a single location. Project 1879 was subsequently configured as two locations, and the same loss factor has been deemed to be calculated for each location in accordance with subsection 8 of section 501.10 of the ISO rules.