

September 12, 2013

Dear Loss Factor Stakeholders,

Re: **All-bus 2017 5th year loss factors**

In order to help stakeholders better understand and utilize the non-binding 5th year loss factor estimates, the AESO is posting an all-bus 2017 5th year loss factors as supplementary information to the [Summary of 2017 Loss Factor Estimates](#) posted on March 28, 2013. Similar all-bus loss factor information has been posted in the next year loss factor process in the past years. The AESO believes posting the all-bus loss factors for the 5th year should provide stakeholders further insightful information of loss factor distributions in the future.

Five PDF files are posted with tables of the all-bus loss factors corresponding to the five scenarios of 2017 5th year loss factor process. The AESO also posts an interactive dashboard of the all-bus 2017 5th year loss factors to improve the presentation of this large amount of data. The interactive dashboard displays the all-bus loss factors for all 5 scenarios. The interactive dashboard provides filters that can be applied to customize the data view of the loss factor panel on the right side. Four filters are included in this interface, including Scenario, Area, Bus kV and Bus No. In addition, an interactive map is also included in the dashboard to act as an additional area filter with visual geographical information. Two examples are attached to demonstrate how the filters are applied.

As always, if you have any questions please send them to lossfactor@aeso.ca.

Yours truly,

Original Signed By

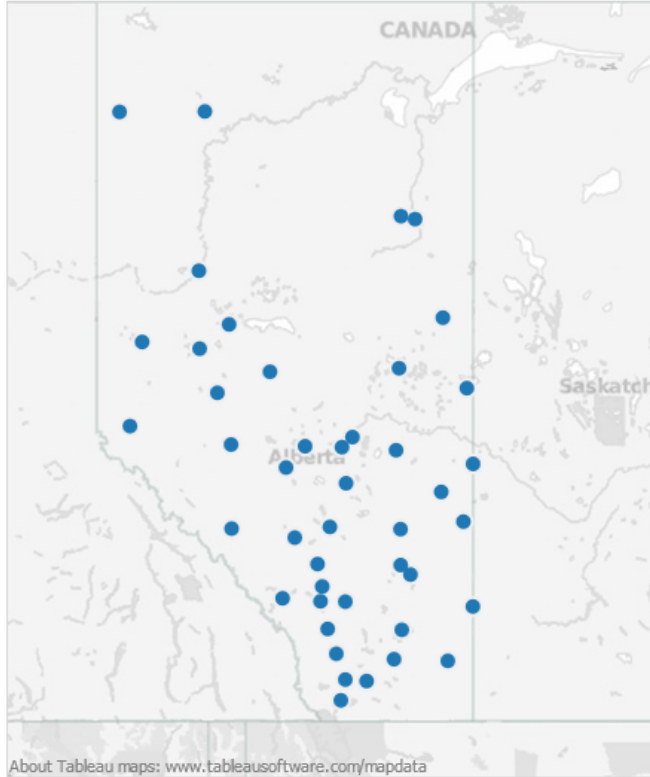
John Kehler
Director, Transmission System Performance

cc: Peng Wang
Han Yu

Example 1:

As selected in the filter panels below the map, loss factor panel on the right side only displays loss factors for 240kV buses in area 6 (Calgary) in Scenario A and C.

Alberta Loss Factor Map



2017 5th Year All-bus Loss Factors

Scenario	Area	Bus kV	Bus No.	Bus Name	Loss Factor
A	6 Calgary	240	159	LANGDON4	1.23%
			160	JANET 4	0.91%
			161	SARCEE 4	0.46%
			162	E CALGAR	0.65%
			187	BEDDING1	0.66%
			544	ENMX65S4	0.77%
			617	FOOTHLL1	0.96%
			772	ENMX25S7	0.90%
			5158	102ST1	1.16%
			5159	102ST4	1.23%
C	6 Calgary	240	159	LANGDON4	1.03%
			160	JANET 4	0.75%
			161	SARCEE 4	0.33%
			162	E CALGAR	0.49%
			187	BEDDING1	0.56%
			544	ENMX65S4	0.59%
			617	FOOTHLL1	0.74%
			772	ENMX25S7	0.74%
			5158	102ST1	0.98%
			5159	102ST4	1.03%

Scenario: (All) A B C D E

Area: (All) 4 Medicine Hat 6 Calgary 13 Lloydminster 17 Rainbow Lake 18 High Level 19 Peace River 20 Grande Prairie 21 High Prairie 22 Grande Cache 23 Valleyview 24 Fox Creek 26 Swan Hills

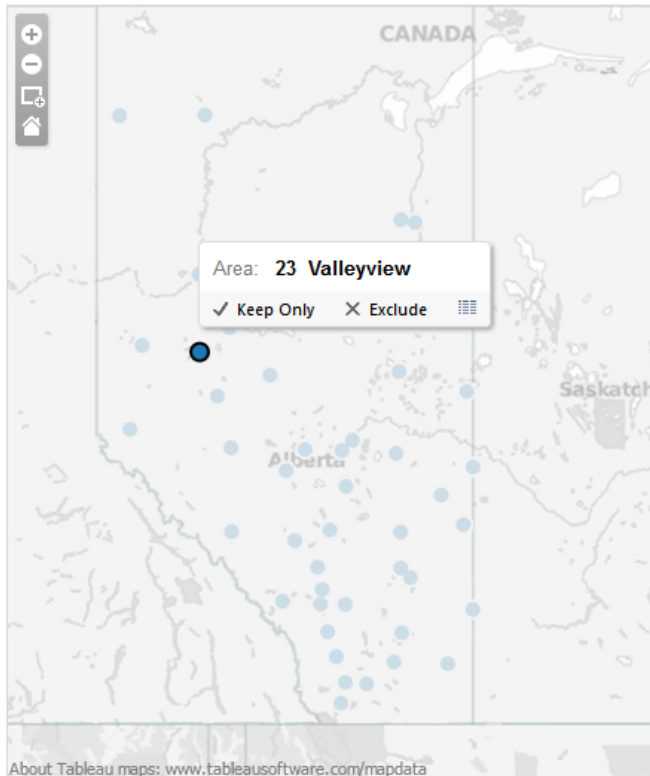
Bus kV: (All) 138 240 500

Bus No.: (All) 2 3 4 5 7 8 9 12 13 15 16 17

Example 2

In this example, the interactive map is used as the area filter and only Area 23 is selected. In addition, 138kV is selected for filter Bus kV. The loss factor panel on the right side therefore displays loss factors for 138kV buses in area 23 for all 5 scenarios.

Alberta Loss Factor Map



Scenario	Area	Bus kV	Bus No.
<input checked="" type="checkbox"/> (All)	<input checked="" type="checkbox"/> (All)	<input type="checkbox"/> (All)	<input checked="" type="checkbox"/> (All)
<input checked="" type="checkbox"/> A	<input checked="" type="checkbox"/> 4 Medicine Hat	<input checked="" type="checkbox"/> 138	<input checked="" type="checkbox"/> 2
<input checked="" type="checkbox"/> B	<input checked="" type="checkbox"/> 6 Calgary	<input checked="" type="checkbox"/> 240	<input checked="" type="checkbox"/> 3
<input checked="" type="checkbox"/> C	<input checked="" type="checkbox"/> 13 Lloydminster	<input type="checkbox"/> 500	<input checked="" type="checkbox"/> 4
<input checked="" type="checkbox"/> D	<input checked="" type="checkbox"/> 17 Rainbow Lake		<input checked="" type="checkbox"/> 5
<input checked="" type="checkbox"/> E	<input checked="" type="checkbox"/> 18 High Level		<input checked="" type="checkbox"/> 7
	<input checked="" type="checkbox"/> 19 Peace River		<input checked="" type="checkbox"/> 8
	<input checked="" type="checkbox"/> 20 Grande Prairie		<input checked="" type="checkbox"/> 9
	<input checked="" type="checkbox"/> 21 High Prairie		<input checked="" type="checkbox"/> 12
	<input checked="" type="checkbox"/> 22 Grande Cache		<input checked="" type="checkbox"/> 13
	<input checked="" type="checkbox"/> 23 Valleyview		<input checked="" type="checkbox"/> 15
	<input checked="" type="checkbox"/> 24 Fox Creek		<input checked="" type="checkbox"/> 16
	<input checked="" type="checkbox"/> 26 Swan Hills		<input checked="" type="checkbox"/> 17

2017 5th Year All-bus Loss Factors

Scenario	Area	Bus kV	Bus No.	Bus Name	Loss Factor			
A	23 Valleyview	138	1153	TRIANGL7	0.09%			
			1155	VALLEYV7	0.50%			
			1164	L.SMOKY7	0.66%			
			1165	STURGE07	0.65%			
			1172	STURG_1	0.69%			
			1180	GOOSE R7	0.37%			
			10155	794S701T	0.38%			
			10165	734S701T	0.64%			
			B	23 Valleyview	138	1153	TRIANGL7	1.01%
						1155	VALLEYV7	1.15%
1164	L.SMOKY7	1.26%						
1165	STURGE07	1.26%						
1172	STURG_1	1.24%						
1180	GOOSE R7	0.91%						
10155	794S701T	1.02%						
10165	734S701T	1.25%						
C	23 Valleyview	138				1153	TRIANGL7	0.62%
						1155	VALLEYV7	0.96%
			1164	L.SMOKY7	1.11%			
			1165	STURGE07	1.10%			
			1172	STURG_1	1.09%			
			1180	GOOSE R7	0.79%			
			10155	794S701T	0.84%			
			10165	734S701T	1.09%			
			D	23 Valleyview	138	1153	TRIANGL7	-1.09%
						1155	VALLEYV7	-0.40%
1164	L.SMOKY7	-0.21%						
1165	STURGE07	-0.21%						
1172	STURG_1	-0.16%						
1180	GOOSE R7	-0.42%						
10155	794S701T	-0.51%						
10165	734S701T	-0.22%						
E	23 Valleyview	138				1153	TRIANGL7	-4.04%
						1155	VALLEYV7	-2.60%
			1164	L.SMOKY7	-2.30%			
			1165	STURGE07	-2.30%			
			1172	STURG_1	-2.31%			