Single Line Diagrams

AESO 2025 Long-Term Transmission Plan

JANUARY 2025

Contents

Near-Term Regional Transmission Plans

Northwest Planning Region

Northeast Planning Region

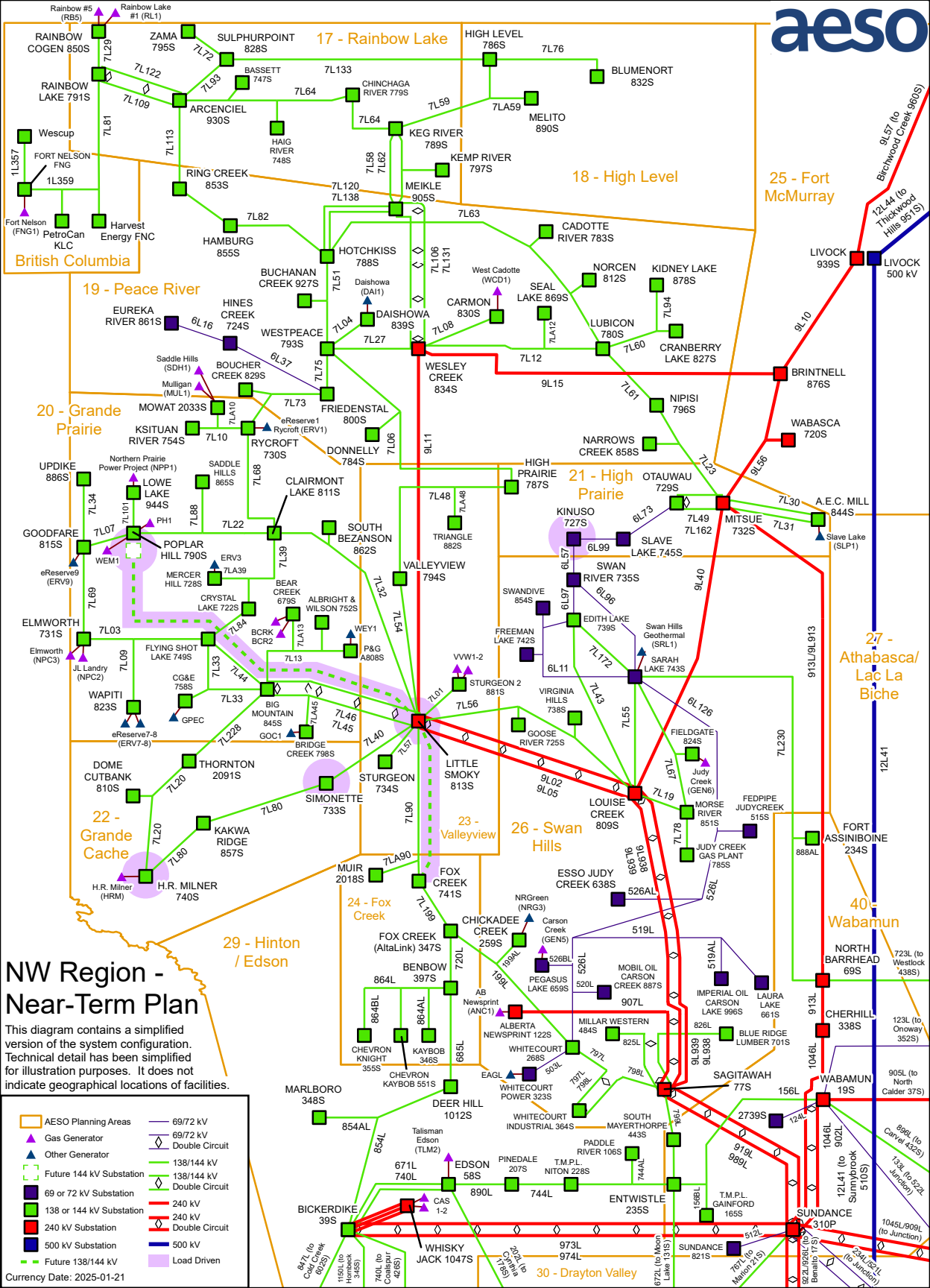
Central Planning Region

Edmonton Planning Region

Calgary Planning Region

South Planning Region

Interties


NW Region - Near-Term Plan
This diagram contains a simplified version of the system configuration. Technical detail has been simplified for illustration purposes. It does not indicate geographical locations of facilities.
AESO Planning Areas
Gas Generator
Other Generator
Future 144 kV Substation
69 or 72 kV Substation
138 or 144 kV Substation
240 kV Substation
500 kV Substation
Future 138/144 kV
69/72 kV
69/72 kV Double Circuit
138/144 kV
138/144 kV Double Circuit
240 kV
240 kV Double Circuit
500 kV
Load Driven
Currency Date: 2025-01-21
17 - Rainbow Lake
18 - High Level
19 - Peace River
20 - Grande Prairie
21 - High Prairie
22 - Grande Cache
23 - Valleyview
24 - Fox Creek
25 - Fort McMurray
26 - Swan Hills
27 - Athabasca/ Lac La Biche
29 - Hinton / Edson
30 - Drayton Valley
40 - Wabamun
British Columbia
Rainbow #5 (RB5)
Rainbow Lake #1 (RL1)
RAINBOW COGEN 850S
RAINBOW LAKE 791S
ZAMA 795S
SULPHURPOINT 828S
BASSETT 747S
ARCENCIEL 930S
HIGH LEVEL 786S
BLUMENORT 832S
CHINCHAGA RIVER 779S
MELITO 890S
KEG RIVER 789S
KEMP RIVER 797S
HAIG RIVER 748S
RING CREEK 853S
MEIKLE 905S
Wescup
FORT NELSON FNG
1L359
Fort Nelson (FNG1)
PetroCan KLC
Harvest Energy FNC
HAMBURG 855S
CADOTTE RIVER 783S
HOTCHKISS 788S
BUCHANAN CREEK 927S
Daishowa (DAI1)
West Cadotte (WCD1)
NORCEN 812S
KIDNEY LAKE 878S
SEAL LAKE 869S
CARMON 830S
LUBICON 780S
CRANBERRY LAKE 827S
EUREKA RIVER 861S
HINES CREEK 724S
DAISHOWA 839S
WESTPEACE 793S
WESLEY CREEK 834S
BRINTNELL 876S
Saddle Hills (SDH1)
Mulligan (MUL1)
BOUCHER CREEK 829S
MOWAT 2033S
FRIEDENSTAL 800S
NIPISI 796S
WABASCA 720S
KSITUAN RIVER 754S
eReserve1 Rycroft (ERV1)
RYCROFT 730S
DONNELLY 784S
NARROWS CREEK 858S
LIVOCK 939S
LIVOCK 500 kV
9L57 (to Birchwood Creek 960S)
12L44 (to Thickwood Hills 951S)
9L10
UPDIKE 886S
Northern Prairie Power Project (NPP1)
LOWE LAKE 944S
SADDLE HILLS 865S
CLAIRMONT LAKE 811S
HIGH PRAIRIE 787S
OTAUWAU 729S
A.E.C. MILL 844S
Slave Lake (SLP1)
GOODFARE 815S
PH1
POPLAR HILL 790S
WEM1
eReserve9 (ERV9)
ERV3
MERCER HILL 728S
SOUTH BEZANSON 862S
TRIANGLE 882S
KINUSO 727S
SLAVE LAKE 745S
MITSUE 732S
VALLEYVIEW 794S
SWAN RIVER 735S
SWANDIVE 854S
EDITH LAKE 739S
BEAR CREEK 679S
CRYSTAL LAKE 722S
ALBRIGHT & WILSON 752S
ELMWORTH 731S
Elmworth (NPC3)
JL Landry (NPC2)
FLYING SHOT LAKE 749S
BCRK BCR2
WEY1
P&G A808S
FREEMAN LAKE 742S
Swan Hills Geothermal (SRL1)
SARAH LAKE 743S
VVW1-2
STURGEON 2 881S
VIRGINIA HILLS 738S
CG&E 758S
GPEC
WAPITI 823S
eReserve7-8 (ERV7-8)
BIG MOUNTAIN 845S
GOC1
BRIDGE CREEK 798S
GOOSE RIVER 725S
FIELDGATE 824S
Judy Creek (GEN6)
DOME CUTBANK 810S
THORNTON 2091S
STURGEON 734S
LITTLE SMOKY 813S
LOUISE CREEK 809S
MORSE RIVER 851S
FEDPIPE JUDYCREEK 515S
JUDY CREEK GAS PLANT 785S
FORT ASSINIBOINE 234S
888AL
SIMONETTE 733S
KAKWA RIDGE 857S
H.R. Milner (HRM)
H.R. MILNER 740S
MUIR 2018S
FOX CREEK 741S
ESSO JUDY CREEK 638S
526AL
NRGreen (NRG3)
CHICKADEE CREEK 259S
Carson Creek (GEN5)
519L
FOX CREEK (AltaLink) 347S
BENBOW 397S
526BL
PEGASUS LAKE 659S
520L
MOBIL OIL CARSON CREEK 887S
907L
IMPERIAL OIL CARSON LAKE 996S
LAURA LAKE 661S
NORTH BARRHEAD 69S
723L (to Westlock 438S)
AB Newsprint (ANC1)
ALBERTA NEWSPRINT 122S
MILLAR WESTERN 484S
826L
BLUE RIDGE LUMBER 701S
CHERHILL 338S
123L (to Onoway 352S)
CHEVRON KNIGHT 355S
KAYBOB 346S
WHITECOURT 268S
503L
CHEVRON KAYBOB 551S
EAGL
WHITECOURT POWER 323S
SAGITAWAH 77S
WABAMUN 19S
905L (to North Calder 37S)
MARLBORO 348S
DEER HILL 1012S
WHITECOURT INDUSTRIAL 364S
SOUTH MAYERTHORPE 443S
2739S
Talisman Edson (TLM2)
PADDLE RIVER 106S
PINEDALE 207S
T.M.P.L. NITON 228S
EDSON 58S
671L 740L
890L
744L
ENTWISTLE 235S
T.M.P.L. GAINFORD 165S
SUNDANCE 310P
BICKERDIKE 39S
CAS 1-2
WHISKY JACK 1047S
973L
974L
SUNDANCE 821S
847L (to Cold Creek 802S)
1150L (to Hornbeck 345S)
740L (to Coalspur 426S)
202L (to Cynthia 716S)
672L (to Moon Lake 1315S)
767L (to Marion 215S)
922L/926L (to Benalto 173S)
1234L/821L (to Junction)
1045L/909L (to Junction)
886L (to Carvel 432S)
133L (to 522L Junction)
12L41 (to Sunnybrook 510S)

- Gas Generator
- Other Generator
- 69 or 72 kV Substation
- 138 or 144 kV Substation
- 240 kV Substation
- 500 kV Substation
- HVDC Line
- Normally Open Line
- 69/72 kV
- 138/144 kV
- 138/144 kV Double Circuit
- 240 kV
- 240 kV Double Circuit
- 500 kV
- 500 kV Double Circuit
- Load Driven
- AESO Planning Areas

Northeast Region - Near-Term Plan

This diagram contains a simplified version of the system configuration. Technical detail has been simplified for illustration purposes. It does not indicate geographical locations of facilities.

aeso

Currency Date: 2025-01-21

HORIZON MINING 838S
HORIZON UPGRADING 842S
CNRL Horizon (CNR5)
BITUMOUNT 941S
FORT HILLS 635EDD-1000
Fort Hills (FH1)
SECORD 2005S
MCCLELLAND 957S
IOR3 Kearl (IOR3)
KEARL 9900S
BLACK FLY 934S
GREEN STOCKING 925S
AURORA
Syncrude #1 (SCL1)
JOSLYN CREEK 849S
MUSKEG RIVER 847S
HARTLY 919S
JACK PINE 920S
Muskeg River (MKR1)
PLANT 30-2 UE-1
East Mine
MILDRED LAKE (Syncrude Plant 31)
D05
MILLENIUM 29EDD-1
VOYAGEUR 29EDD-94
RUTH LAKE 848S
DOVER 888S
MACKAY RIVER 874S
MacKay River (MKRC)
HORSESHOE 737S
STEEPBANK 836S
STONEY ISLAND 29EDD-61
INGLIS ISLAND 29EDD-60
DOG RIB 2082S
THICKWOOD HILLS 951S
PARSONS CREEK 718S
HALFWAY 2014S
TOWER ROAD 933S
AMR02 937S
BIRCHWOOD CREEK 960S
YEO 2015S
HANGINGSTONE 820S
SALT CREEK 977S
AHS 01 279S
WILLOW LAKE 2009S
GERMAIN 950S
LIVOCK 939S
BRINTNELL 876S
9L15 (to Wesley Creek 834S)
WABASCA 720S
9L56 (to Mitsue 732S)
DAWES 2011S
ALGAR 875S
SWEETHEART LAKE 2032S
GREGOIRE 883S
HORSE RIVER 917S
MARIANA 833S
FREER 2043S
CROW 860S
MCMILLAN 885S
ROUND HILL 852S
Nexen Inc #2 (NX02)
LONG LAKE 841S
LONG LAKE COGEN 864S
KINOSIS 856S
QUIGLEY 989S
KETTLE RIVER 2049S
MEADOW CREEK 2081S
CHARD 658S
WADDEL 907S
BOHN 931S
MEG1 Christina Lake (MEG1)
Christina Lake (CL01)
SUNDAY CREEK 539S
CONKLIN 762S
ENGSTROM 2060S
LEISMER 72S
CHRISTINA LAKE 723S
BLACK SPRUCE 154S
JACKFISH 698S
MARGIE 1034S
IPIATIK 167S
PIKE 170S
WINEFRED 818S
KIRBY 651S
UNDERWOOD 183S
HEART LAKE 898S
THOMPSON 140S
LAC LA BICHE 157S
ABEE 993S
WEASEL CREEK 947S
WHITEFISH LAKE 825S
FLATBUSH 500S
WAP-7L1
Westlock (WST1)
WAP 1S
WESTLOCK 438S
CLYDE 150S
COLINTON 159S
BOYLE 56S
WAUPISOO 405S
FLAT LAKE 242S
GRASSLAND 282S
APF Athabasca (AFG1)
PLAMONDON 353S
HEARTLAND 12S
REDWATER 171S
DEERLAND 13S
HEATHFIELD 2029S
BEAMER 233S
AMELIA 108S
LAMOUREUX 71S
C.U.B. 672S
URSUS 430S
JOSEPHBURG 410S
DOW CHEMICAL FORT SASK. 166S
FORT SASK. 54S
B.F.GOODRICH FORT SASK. 452S
SHERRITT GORDON 172S
ROSS CREEK 906S
FORT SASK CO-GEN 218S
DHC 258S
SCORIA 318S
OPAL 439S
RIVERSIDE 388S
GRANITE 342S
BANNERMAN 681S
TC02
SCOTFORD UPGRADER 879S
SCOTFORD 409S
AIR LIQUIDE 408S
ALS1
APS1
BRUDERHEIM 127S
ALBCHEM BEAVERHILL CREEK 308S
CANADIAN OXY ASTOTIN CREEK 365S
WESTWOOD 422S
ATHABASCA CROSSING EDD200
FIREBAG 29EDD-18
29EDD-0063
29EDD-71
29EDD-65
29EDD-34
29EDD-85
29EDD-7
29EDD-67
29EDD-93
29EDD-9
29EDD-8
29EDD-10
29EDD-19
29EDD-45
29EDD-33
29EDD-31
29EDD-62
29EDD-46
29EDD-64
29EDD-84
29EDD-83
29EDD-22
29EDD-2
29EDD-3
29EDD-5
29EDD-0020
29EDD-55
29PL9-12
29PL9-13
29PL7-1
29PL7-10
29PL9-14
29PL9-15
29PL6-14
29PL6-16
29PL6-29
29PL6-23
29PL6-24
29PL6-28
29PL6-27
29PL6-26
29PL9-2
29PL9-1
29PL9-3/4
29PL9-5
29PL9-6
29PL6-22
29PL6-05
29PL6-06
29PL6-20
29PL6-03
29PL6-02
29PL6-01
29PL6-7
29PL9-16
29PL9-17
29PL9-24
29PL9-25
9L155
9L137
9L16
9L32
9L66
9L69
9L77
9L39
9L84
9L08
9L09
9L74
9L58
9L43
9L30
9L112
9L01
9L58
RL1
RL2
201-PTL260-1
201-PTL260-2
7L47
7L71
9L162
9L193
9L23
7L165
7L97
7L135
9L07
7L182
7L126
7L36
7L194
7L147
7L155
7L170
7L38
7LA121
7LB121
9L55
9L85
7L15
7L104
7L183
7L167
7L114
7LA114
7LA183
9L45
7L05
9L990
957L
9L930
1099L
1090L
1118L
1115L
971L
1117L
1116L
789BL
789L
428L
457L
445L
1085L
1086L
9L47
724L
723L (to North Barrhead 69S)
223L
710L
633L
796L
796AL
728L
788L
788AL
9L22
9L81
794L
9L960
9L961
9L36/9L37 (to Marguerite Lake 826S)
792L (to N.W. Cardiff 191S)
735L
808L
808AL
1054L 1061L
1054L 943L
13L50
794L (to Whitby Lake 819S)
1206L/1212L (to Ellerslie 89S)
726L (to North Calder 37S)
920L (to Castle Downs)
921L (to Clover Bar 987S)
761L (to East Edmonton 38S)
12L44
9L57
9L10
9L28
9L19
9L144
12L70
12L85
708L
708AL
942L 1061L
942L 1120L
942L 997L
861L
787L
781L
862L
899L
707L
709L
694L
706L
706AL
776L
773L
846L
1061L 943L
1120L 943L
807L
807AL
815L
EX1 -01L
ALC02L
ALC03L
856L
856L 857L
857L
776L 706L
12L41 (to Sunnybrook 510S)
EATL 13L50 (to Newell 2075S)
700L (to Sherwood Park 746S)

25 - Fort McMurray

27 - Athabasca / Lac La Biche

28 - Cold Lake

33 - Fort Saskatchewan

56 - Vegreville

60 - Edmonton

From Edmonton Region Near Term Plan

Generation Driven
Under Construction
Solar Generator
Gas Generator
Hydro Generator
Wind Generator
Other Generator

Substation
69 or 72 kV Substation
138 or 144 kV Substation
240 kV Substation
500 kV Substation
Future 138/144 kV
Future 240 kV Double Circuit
HVDC Line

Normally Open Line
69/72 kV
138/144 kV
138/144 kV Double Circuit
240 kV
240 kV Double Circuit
500 kV
AESO Planning Areas

Currency Date: 2025-01-21

This diagram contains a simplified version of the system configuration. Technical detail has been simplified for illustration purposes. It does not indicate geographical locations of facilities.

Central Region - No Near or Long-Term Developments

Red Deer Area Inset

Edmonton Region

24 - Fox Creek
26 - Swan Hills
29 - Hinton / Edson
30 - Drayton Valley
31 - Wetaskiwin
35 - Red Deer
36 - Alliance / Battle River
37 - Provost
39 - Didsbury
42 - Hanna
25 - Fort McMurray
27 - Athabasca/ Lac la Biche
28 - Cold Lake
56 - Vegreville
13 - Lloydminster
32 - Wainwright
34 - Abraham Lake
38 - Caroline
39 - Didsbury
44 - Seebe
45 - Strathmore/ Blackie
43 - Sheerness
48 - Empress

OBED 411S
DEER HILL 1012S
MARLBORO 348S
DALEHURST 975S
HORNBECK 345S
FICKLE LAKE 406S
VISTA 1029S
COLD CREEK 602S
WATSON CREEK 104S
Weldwood #1 (WWD1)
SHERIDAN 2085S
CHEVIOT 101S
COALSPUR 426S
CADOMIN 983S
CARDINAL RIVER 302S
COAL VALLEY 527S
GULF ROBB 414S
EDSON 58S
Talisman Edson (TLM2)
CAS 1-2
WHISKY JACK 1047S
BICKERDIKE 39S
PINEDALE 207S
T.M.P.L. NITON 228S
PADDLE RIVER 106S
ENTWISTLE 235S
156L (to Wabamun 19S)
973L/974L (to Sundance 310P)
CYNTHIA 178S
WEST PEMBINA 359S
LODGEPOLE 61S
PETRO CANADA BRAZEAU RIVER 489S
WEST PEMBINA 477S
West Pembina (PMB1)
ELK RIVER 445S
BRAZEAU OUTLET WORKS 294S
BRAZEAU 62S
Brazeau Hydro (BRA) G1-G2
BRAZEAU 358S
MOON LAKE 131S
VIOLET GROVE 283S
BUCK LAKE 454S
WILLESDENGREEN 68S
KEYSTONE 384S
922L/926L (to Sundance 310P)
834L (to Keephills 320P)
190L/903L (to Keephills 320P)
WATL (to Sunnybrook 510S)
1083L (to Wolf Creek 288S)
914L (to Bigstone 86S)
See Red Deer Area Inset
ROCKY MOUNTAIN HOUSE 262S
Bighorn Hydro (BIG) G1-G2
BIGHORN PLANT 250P
STRACHAN 263S
RAVEN RIVER 634S
RICINUS 581S
LIMESTONE 304S
Shell Caroline (SHCG)
CAROLINE 378S
SCHRADER CREEK 531S
Dickson Dam (DKSN)
DICKSON DAM
SHELL HARMATTAN 238S
EAGLE CREEK 412S
SUNDRE 575S
HARMATTAN 256S
AltaGas Harmattan (HMT1)
BENALTO 17S
INNISFAIL 214S
OLDS 55S
JOHNSON 281S
MADDEN 373S
RED DEER 63S
HAZELWOOD 287S
WILSON CREEK (WLC1)
RIMBEY 297S
ECKVILLE 534S
BLACKFALDS 198S
Blackfalds (BFD1)
NORTH RED DEER 217S
RED DEER NORTH RD14S
SOUTH RED DEER 194S
RED DEER DOWNTOWN RD15S
TIMBERLANDS 209S
GAETZ 87S
N.E. LACOMBE 212S
UNION CARBIDE PRENTISS 276S
ELLIS 332S
CETO
HAYNES 482S
Joffre Solar 1-2 (JFS1-2)
Joffre #1 (JOF1)
JOFFRE 535S
BROOKFIELD 536S
PIPER CREEK 247S
Benalto 1 (VBN1)
SYLVAN LAKE 580S
BENALTO 17S
717L (to Rocky Mountain House 262S)
848L (to Caroline 378S)
918L (to SS-47)
906L/928L (to Sarcee 42S)
1325L WATL (to Langdon 102S)
1082L (to Hazelwood 287S)
925L (to Janet 74S)
901L (to Janet 74S)
912L (to Nevis 766S)
1325L WATL (to Sunnybrook 510S)
190L/903L (to Keephills 320P)
922L (to Sundance 310P)
995L (to Brazeau 62S)
926L (to Sundance 310P)
757L
758L
444L
776L 778L
775L
784L
759L 775L
756L 759L 793L
793L
775L 784L
425L
426L
1083L 914L
900L
912L 901L
914L 912L
637L
648L
755L
1083L
1083L 914L
889L
702L
703L
704L
705L
706L
707L
708L
709L
710L
711L
712L
713L
714L
715L
716L
717L
718L
719L
720L
721L
722L
723L
724L
725L
726L
727L
728L
729L
730L
731L
732L
733L
734L
735L
736L
737L
738L
739L
740L
741L

Edmonton Region - Near-Term Plan

This diagram contains a simplified version of the system configuration. Technical detail has been simplified for illustration purposes. It does not indicate geographical locations of facilities. For clarity the City of Edmonton and East Edmonton are shown as insets.

Currency Date: 2025-01-21

Solar Generator
Gas Generator
Future 240 kV Substation
Substation to be Decommissioned
69 or 72 kV Substation
138 or 144 kV Substation
240 kV Substation
500 kV Substation
Future 69/72 kV
Future 240 kV
Line to be Decommissioned
HVDC Line
Normally Open Line
69/72 kV
69/72 kV Double Circuit
69/138 kV Double Circuit
138/144 kV
138/144 kV Double Circuit
240 kV
240 kV Double Circuit
240 kV Double Circuit One Side Open
500 kV
500 kV Double Circuit
Load Driven
AESO Planning Areas

East Edmonton Inset

CLOVER BAR 987S
Cloverbar 1-3 ENC1-3)
921L (to Lamoureux 71S)
761L (to Lamoureux 71S)
IMPERIAL OIL EDMONTON 95S
Strathcona (IOR4)
BRETVILLE 185S
605L
YASA 286S
PETRO-CANADA EDMONTON 184S
606L
737L
761L
915L 947L
738L
AT PLASTIC 4RS
738AL
AT PLASTIC 5RS
ANTHONY HENDAY 309S
705L
KNIGHTSBRIDGE 216S
219L
EAST EDMONTON 38S
741L
865L
822L
BASELINE 317S
731L
731L (to Broadmoor 420S)
STELCO EDMONTON 133S
822AL
1059L 908L
736L
72LH8 (to Hardisty)
EAST INDUSTRIAL
908AL 1059AL
BERNESE 293S
South Edmonton Terminal (SET1)
72LS24 (to Strathcona)
LAMBTON
1059L 1058L
1206L/1212L (to Heartland 12S)
ELLERSLIE 89S
1057L 908L
SUMMERSIDE 657S
1058L 908L
780L 897L
BRETONA 45S
897L
874L (to Cooking Lake 522S)
946L 947L
780L (to Cooking Lake 522S)

City of Edmonton Inset (U/G = Underground Line)

920L (to North Calder 37S)
CASTLE DOWNS
920L (to Lamoureux 71S)
72NK23 (U/G)
KENNEDALE
72CK12 (U/G)
WOODCROFT
(Normally Open Point within Substation)
72NW15
NAMAO
72CK13 (U/G)
921L (to Lamoureux 71S)
Cloverbar #1-3 (ENC1-3)
72CN10 (U/G)
72CH9 (U/G)
72JW19 (U/G)
72CH11 (U/G)
CLOVER BAR 987S
1098L (to Poundmaker)
1045L (to Sundance 310P)
JASPER 805S
72RW3 (U/G)
240CV5 (U/G)
72VN21 (U/G)
Fort Road
1044L (to Petrolia)
VICTORIA 511S
72RV4 (U/G)
72RV6 (U/G)
72RV2 (U/G)
HARDISTY
EAST EDMONTON 38S
915L
1059L 908L
ROSSDALE
72JM18 (U/G)
University of Alberta (UOA1)
72RG1 (U/G)
72RG7 (U/G)
BELLAMY
240BA2 (U/G)
240BA3 (U/G)
72LH8
EAST INDUSTRIAL
72PM25L (to Poundmaker)
72MG16 (U/G)
MEADOWLARK
GARNEAU
ARGYLL
LAMBTON
1059L
72LS24
1058L
STRATHCONA
72DS24 (to Dome)
1055L (to Petrolia)
1056L (to Ellerslie 89S)
1058L (to Summerside 657S)
908L (to Ellerslie 89S)
946L/947L (to Ellerslie 89S)

26 - Swan Hills

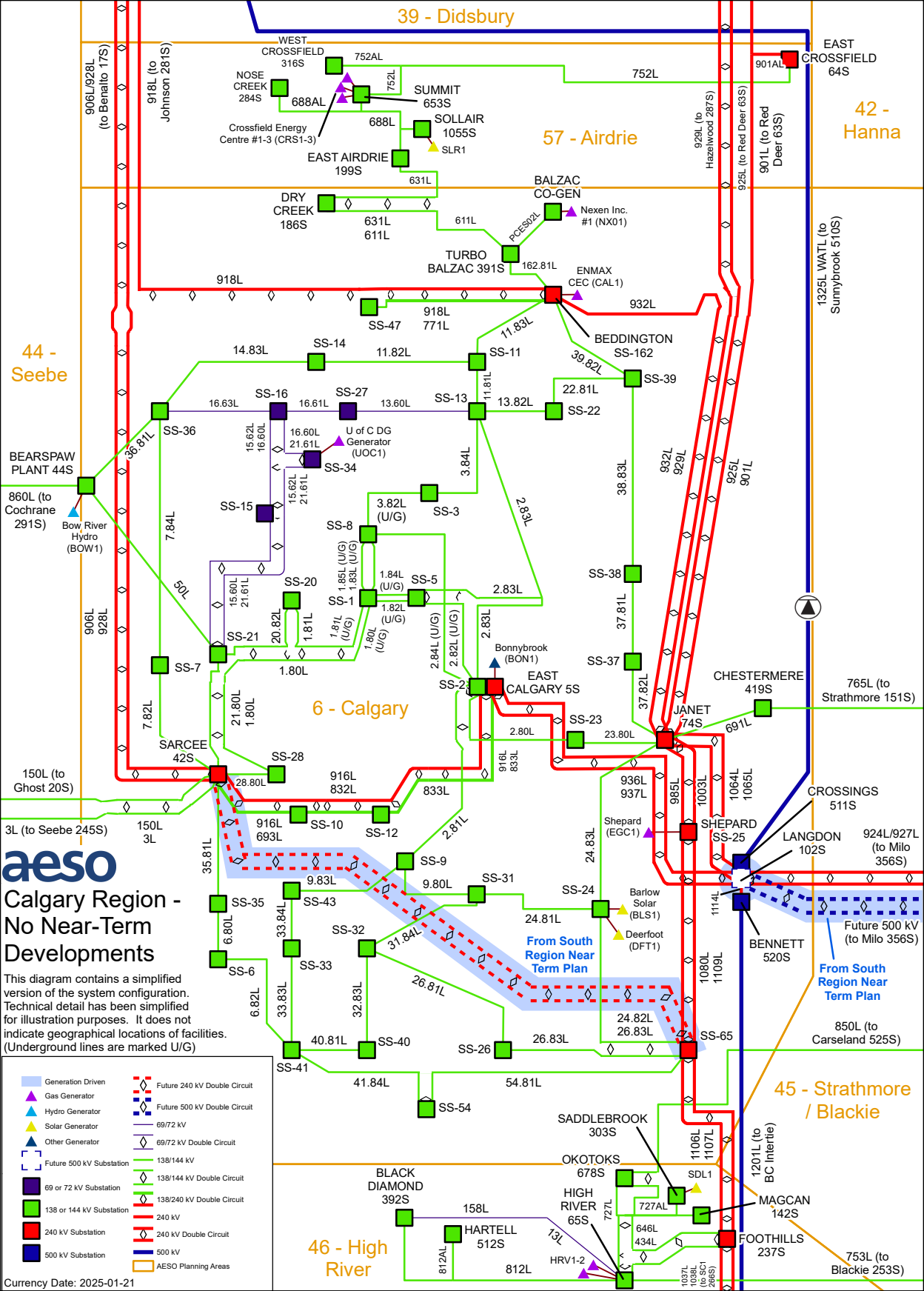
7L230 (to Sarah Lake 743S)
888AL
FORT ASSINIBOINE 234S
913L (to Mitsue 732S)
12L41 (to Livock 939S)

40 - Wabamun

NORTH BARRHEAD 69S
723L (to Westlock 438S)
913L
799L (to Sagitawah 77S)
SOUTH MAYERTHORPE 443S
799L
916L/988L (to Sagitawah 77S)
WABAMUN 2739S
CHERHILL 338S
ONOWAY 352S
124L
1046L
123L
T.M.P.L. GAINFORD 165S
156BL
ENTWISTLE 235S
156L
WABAMUN 19S
905L
896L
919L 989L
744L (to Paddle River 106S)
1046L
902L
139L
234L
SUNDANCE 821S
512L
Sundance #6 (SD6)
MARION 21S
767AL
767L
1045L
SUNDANCE 310P
973L 974L
973L/974L (to Bickerdike 39S)
672L (to Moon Lake 131S)
909L
1045AL
521L
234L
521L
KEEPHILLS 320P
1043L
1202L
SUNDANCE BLOW-DOWN 867S
521AL
Keephills 2-3 (KH2-KH3)
767L
767CL
834L
522L
1202L
1203L
522L
809L
922L/926L (to Benalto 17S)
NEW ROSE VALLEY 635S
30 - Drayton Valley
KEEPHILLS/SUNDANCE MAKE-UP 866S & 868S
522AL
1045L 909L
1044L 909L
1238L
1239L
GENESEE 330p
1209L
430L
Genesee #3 (GN3)
Genesee Repower 1-2 (GNR1-2)
SUNNYBROOK 510S
834L (to Keystone 384S)
1325L (WATL-(to Langdon 102S)
190L/903L (to Benalto 17S)
1083L/914L (to Red Deer 63S)

27 - Athabasca / Lac La Biche

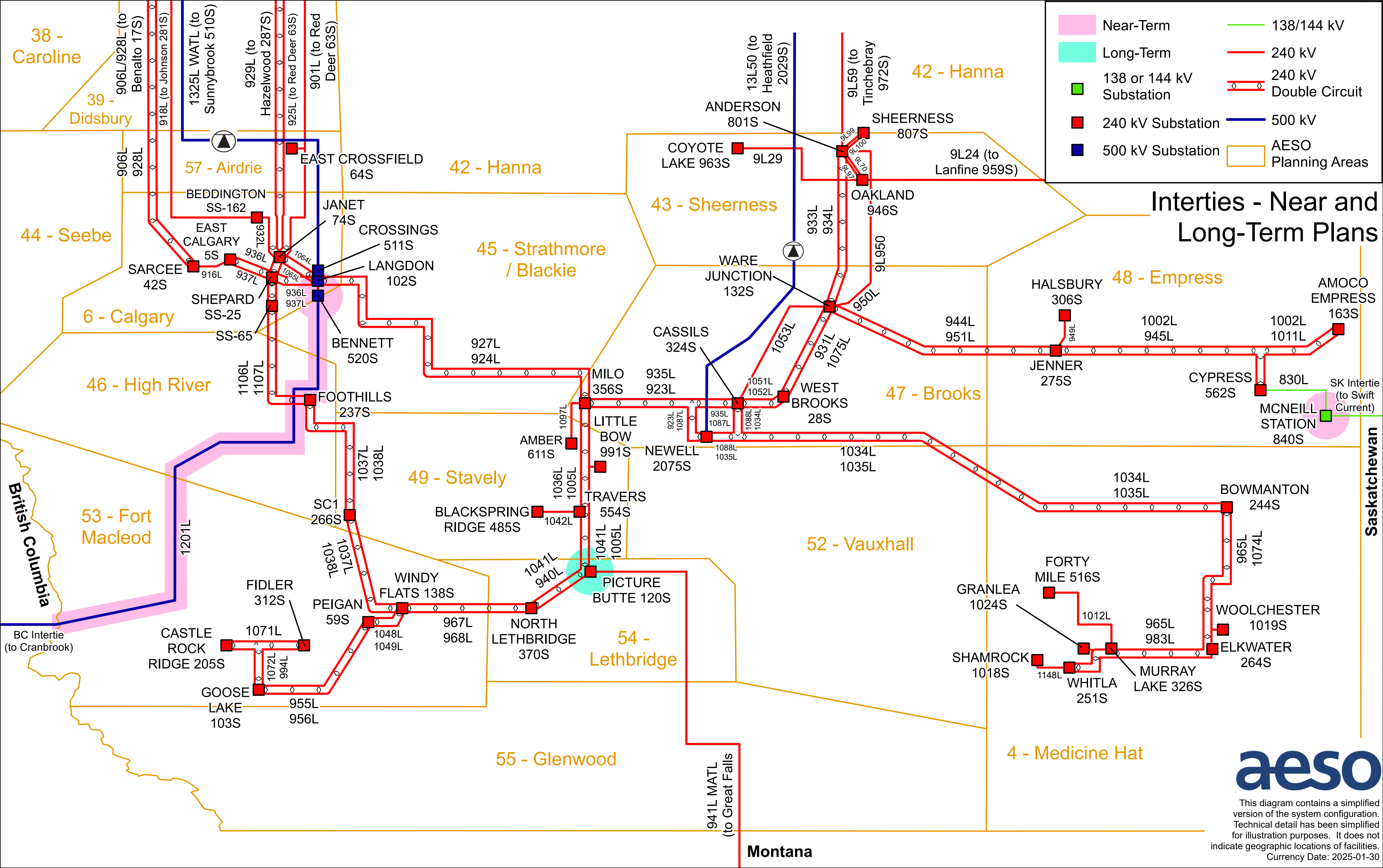
792L (to Clyde 150S)
N.W. CARDIFF 191S
792L
VISCOUNT 92S
726L (to Lamoureux 71S)
1206L/1212L (to Heartland 12S)
NORTH ST. ALBERT 99S
747L
712L
898L
747L
CASTLE DOWNS 920L
920L/921L (to Lamoureux 71S)
SPRUCE GROVE 595S
677L
NORTH CALDER 37S
930L
711L
240CV5
VICTORIA
446L 453L
POUNDMAKER
ACHESON 305S
INLAND CEMENT
761L (to Lamoureux 71S)
921L
CLOVER BAR 987S
Cloverbar 1-3 (ENC1-3)
915L 947L
706L (to Sherritt Gordon 721S)
706L (to Josephburg 410S)
FIBERGLASS
694L
FORT SASK. 54S
707L (to Dow Chemical Fort Saskatchewan 166S)
746AL
700L
WESTWOOD 422S
746BL
CANADA LIQUID AIR 337S
636L
SHERWOOD PARK 746S
746L
731L
BROADMOOR 420S
33 - Fort Saskatchewan
1045L
1098L
JASPER 805S
BELLAMY
240BA2
240BA3
HARRY SMITH 367S
1139L
452L
RIVERVIEW
1044L
PETROLIA
ARGYLL
KKP1-2
1055L
1056L
1044L 908L
761L
DOME
908L 909L
ELLERSLIE 89S
897L
BRETONA 45S
874L
COOKING LAKE 522S
780L
780L 174L
174L (to North Holden 395S)
BARDO 197S
QUEENSLAND 301S
732AL
KINGMAN 299S
732L
730L
Camrose (CRG1)
EAST CAMROSE 285S
729L
ERVICK 542S
729AL
TRUWELD GRATING 6500S
BLACKMUD 155S
739L 838L
DEVON 14S
739L
LEDUC 325S
604L
1112L 1140L
838L
632L
BUFORD 538S
632L
NISKU 149S
454L 455L
SAUNDERS LAKE 289S
174L
60 - Edmonton
910L 914L
858L
803L 804L
BIGSTONE 86S
804L 858L
837L
805L
PIGEON LAKE 964S
910L 914L
PONOKA 331S
421L 422L
WOLF CREEK 288S
883L
NELSON LAKE 429S
31 - Wetaskiwin
WETASKIWIN 40S
739L
1209L
1043L
1202L
1045L 909L
1044L 909L
1238L 1239L
GENESEE 330p
430L
Genesee #3 (GN3)
Genesee Repower 1-2 (GNR1-2)
SUNNYBROOK 510S
834L (to Keystone 384S)
1325L (WATL-(to Langdon 102S)
190L/903L (to Benalto 17S)
1083L/914L (to Red Deer 63S)


39 - Didsbury
42 - Hanna
57 - Airdrie
44 - Seebe
6 - Calgary
45 - Strathmore / Blackie
46 - High River
WEST CROSSFIELD 316S
NOSE CREEK 284S
SUMMIT 653S
SOLLAIR 1055S
SLR1
Crossfield Energy Centre #1-3 (CRS1-3)
EAST AIRDRIE 199S
DRY CREEK 186S
BALZAC CO-GEN
Nexen Inc. #1 (NX01)
TURBO BALZAC 391S
ENMAX CEC (CAL1)
EAST CROSSFIELD 64S
BEDDINGTON SS-162
BEARSPAW PLANT 44S
Bow River Hydro (BOW1)
U of C DG Generator (UOC1)
Bonnybrook (BON1)
EAST CALGARY 5S
CHESTERMERE 419S
JANET 74S
SARCEE 42S
SHEPARD SS-25
CROSSINGS 511S
LANGDON 102S
BENNETT 520S
Shepard (EGC1)
Barlow Solar (BLS1)
Deerfoot (DFT1)
SADDLEBROOK 303S
OKOTOKS 678S
SDL1
BLACK DIAMOND 392S
HIGH RIVER 65S
HARTELL 512S
HRV1-2
MAGCAN 142S
FOOTHILLS 237S
From South Region Near Term Plan
From South Region Near Term Plan
Future 500 kV (to Milo 356S)
1325L WATL (to Sunnybrook 510S)
901L (to Red Deer 63S)
929L (to Hazelwood 287S)
925L (to Red Deer 63S)
906L/928L (to Benalto 17S)
918L (to Johnson 281S)
860L (to Cochrane 291S)
150L (to Ghost 20S)
3L (to Seebe 245S)
765L (to Strathmore 151S)
924L/927L (to Milo 356S)
850L (to Carseland 525S)
1201L (to BC Intertie)
753L (to Blackie 253S)
aeso
Calgary Region - No Near-Term Developments
This diagram contains a simplified version of the system configuration. Technical detail has been simplified for illustration purposes. It does not indicate geographical locations of facilities. (Underground lines are marked U/G)
Generation Driven
Gas Generator
Hydro Generator
Solar Generator
Other Generator
Future 500 kV Substation
69 or 72 kV Substation
138 or 144 kV Substation
240 kV Substation
500 kV Substation
Future 240 kV Double Circuit
Future 500 kV Double Circuit
69/72 kV
69/72 kV Double Circuit
138/144 kV
138/144 kV Double Circuit
138/240 kV Double Circuit
240 kV
240 kV Double Circuit
500 kV
AESO Planning Areas
Currency Date: 2025-01-21

South Region - Near-Term Plan

This diagram contains a simplified version of the system configuration. Technical detail has been simplified for illustration purposes. It does not indicate geographical locations of facilities. For detail on the Calgary Area please see the Calgary Region diagram.

Generation Driven
Load Driven
Gas Generator
Hydro Generator
Solar Generator
Wind Generator
Other Generator
Future 240 kV Substation
Future 500 kV Substation
69 or 72 kV Substation
138 or 144 kV Substation
240 kV Substation
500 kV Substation
Future 138/144 kV
Future 240 kV Double Circuit
Future 500 kV Double Circuit
HVDC Line
Normally Open Line
69/72 kV
138/144 kV
138/144 kV Double Circuit
240 kV
240 kV Double Circuit
500 kV
AESO Planning Areas



Interties - Near and Long-Term Plans
Near-Term
Long-Term
138 or 144 kV Substation
240 kV Substation
500 kV Substation
138/144 kV
240 kV
240 kV Double Circuit
500 kV
AESO Planning Areas
38 - Caroline
39 - Didsbury
57 - Airdrie
42 - Hanna
43 - Sheerness
44 - Seebe
45 - Strathmore / Blackie
48 - Empress
6 - Calgary
46 - High River
47 - Brooks
49 - Stavely
53 - Fort Macleod
52 - Vauxhall
54 - Lethbridge
55 - Glenwood
4 - Medicine Hat
British Columbia
Saskatchewan
Montana
906L/928L (to Benalto 17S)
918L (to Johnson 281S)
1325L WATL (to Sunnybrook 510S)
929L (to Hazelwood 287S)
925L (to Red Deer 63S)
901L (to Red Deer 63S)
906L
928L
EAST CROSSFIELD 64S
BEDDINGTON SS-162
EAST CALGARY 5S
JANET 74S
CROSSINGS 511S
LANGDON 102S
SARCEE 42S
SHEPARD SS-25
SS-65
BENNETT 520S
932L
936L
937L
916L
1064L
1065L
936L 937L
1106L 1107L
FOOTHILLS 237S
927L 924L
MILO 356S
935L 923L
13L50 (to Heathfield 2029S)
9L59 (to Tinchebray 972S)
ANDERSON 801S
SHEERNESS 807S
COYOTE LAKE 963S
9L29
9L24 (to Lanfine 959S)
9L99
9L100
9L70
9L91
OAKLAND 946S
933L 934L
9L950
950L
WARE JUNCTION 132S
HALSBURY 306S
AMOCO EMPRESS 163S
944L 951L
1002L 945L
1002L 1011L
949L
JENNER 275S
CASSILS 324S
1053L
931L 1075L
1051L 1052L
WEST BROOKS 28S
CYPRESS 562S
830L
SK Intertie (to Swift Current)
MCNEILL STATION 840S
LITTLE BOW 991S
AMBER 611S
1097L
923L 1087L
935L 1087L
1088L 1034L
1088L 1035L
NEWELL 2075S
1034L 1035L
1034L 1035L
BOWMANTON 244S
1036L 1005L
TRAVERS 554S
BLACKSPRING RIDGE 485S
1042L
1037L 1038L
SC1 266S
1037L 1038L
1201L
1041L 1005L
1041L 940L
PICTURE BUTTE 120S
WINDY FLATS 138S
PEIGAN 59S
FIDLER 312S
1048L 1049L
967L 968L
NORTH LETHBRIDGE 370S
CASTLE ROCK RIDGE 205S
1071L
1072L 994L
GOOSE LAKE 103S
955L 956L
BC Intertie (to Cranbrook)
941L MATL (to Great Falls)
965L 1074L
FORTY MILE 516S
GRANLEA 1024S
1012L
965L 983L
WOOLCHESTER 1019S
ELKWATER 264S
SHAMROCK 1018S
1148L
WHITLA 251S
MURRAY LAKE 326S
aeso
This diagram contains a simplified version of the system configuration. Technical detail has been simplified for illustration purposes. It does not indicate geographic locations of facilities.
Currency Date: 2025-01-30

Longer-Term Regional Transmission Plans

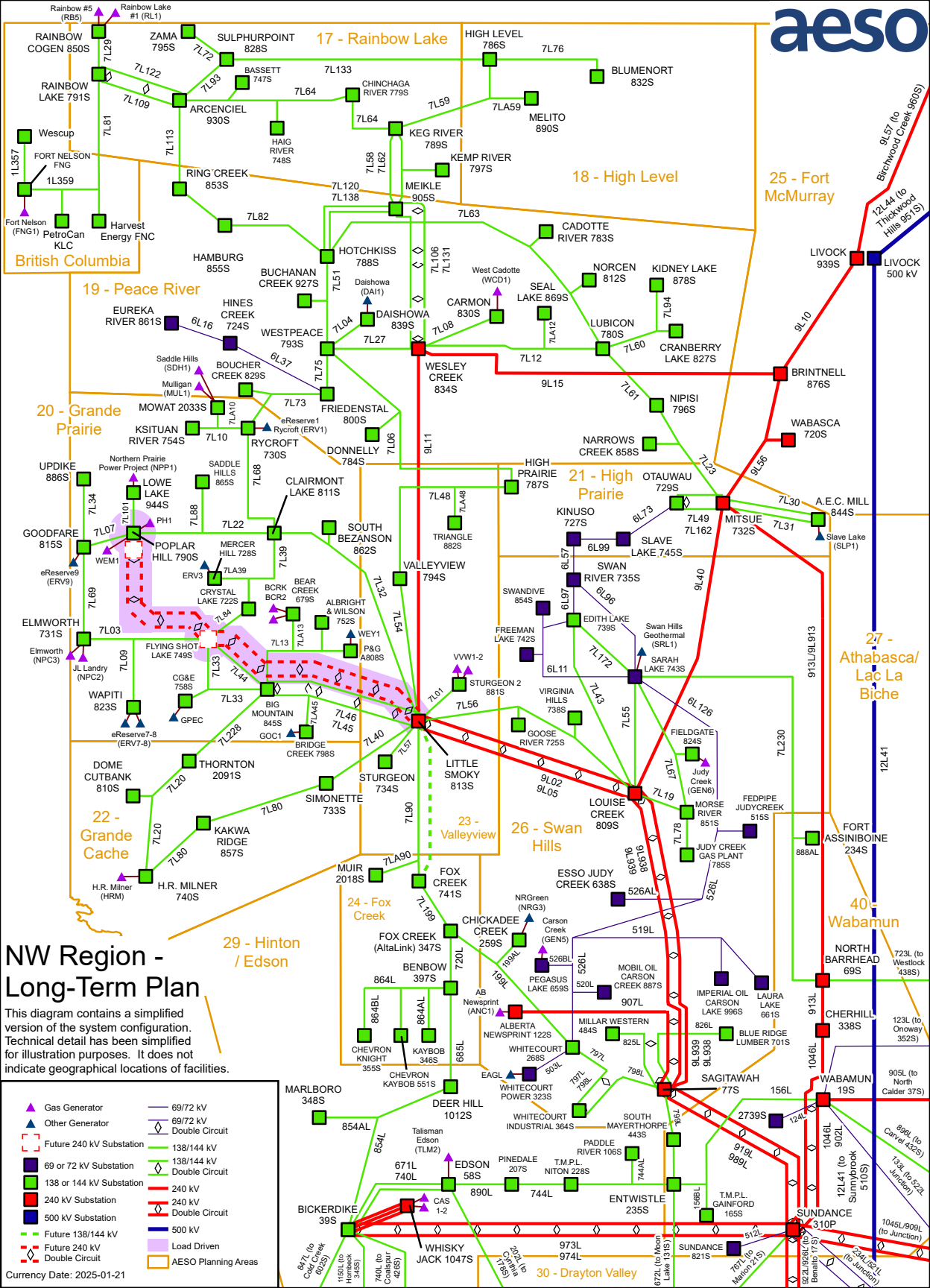
Northwest Planning Region

Northeast Planning Region

Edmonton Planning Region

Calgary Planning Region

South Planning Region


NW Region - Long-Term Plan
This diagram contains a simplified version of the system configuration. Technical detail has been simplified for illustration purposes. It does not indicate geographical locations of facilities.
Gas Generator
Other Generator
Future 240 kV Substation
69 or 72 kV Substation
138 or 144 kV Substation
240 kV Substation
500 kV Substation
Future 138/144 kV
Future 240 kV Double Circuit
69/72 kV
69/72 kV Double Circuit
138/144 kV
138/144 kV Double Circuit
240 kV
240 kV Double Circuit
500 kV
Load Driven
AESO Planning Areas
Currency Date: 2025-01-21
British Columbia
17 - Rainbow Lake
18 - High Level
19 - Peace River
20 - Grande Prairie
21 - High Prairie
22 - Grande Cache
23 - Valleyview
24 - Fox Creek
25 - Fort McMurray
26 - Swan Hills
27 - Athabasca/ Lac La Biche
29 - Hinton / Edson
30 - Drayton Valley
40 - Wabamun
RAINBOW COGEN 850S
Rainbow #5 (RB5)
Rainbow Lake #1 (RL1)
RAINBOW LAKE 791S
ZAMA 795S
SULPHURPOINT 828S
BASSETT 747S
ARCENCIEL 930S
CHINCHAGA RIVER 779S
HIGH LEVEL 786S
BLUMENORT 832S
MELITO 890S
KEG RIVER 789S
KEMP RIVER 797S
HAIG RIVER 748S
Wescup
FORT NELSON FNG
Fort Nelson (FNG1)
PetroCan KLC
Harvest Energy FNC
RING CREEK 853S
MEIKLE 905S
CADOTTE RIVER 783S
HAMBURG 855S
HOTCHKISS 788S
BUCHANAN CREEK 927S
Daishowa (DAI1)
West Cadotte (WCD1)
NORCEN 812S
KIDNEY LAKE 878S
SEAL LAKE 869S
CARMON 830S
EUREKA RIVER 861S
HINES CREEK 724S
DAISHOWA 839S
WESTPEACE 793S
LUBICON 780S
CRANBERRY LAKE 827S
WESLEY CREEK 834S
Saddle Hills (SDH1)
Mulligan (MUL1)
BOUCHER CREEK 829S
MOWAT 2033S
FRIEDENSTAL 800S
KSITUAN RIVER 754S
eReserve1 Rycroft (ERV1)
RYCROFT 730S
DONNELLY 784S
NIPISI 796S
NARROWS CREEK 858S
WABASCA 720S
BRINTNELL 876S
LIVOCK 939S
LIVOCK 500 kV
9L57 (to Birchwood Creek 960S)
12L44 (to Thickwood Hills 951S)
9L10
UPDIKE 886S
Northern Prairie Power Project (NPP1)
LOWE LAKE 944S
SADDLE HILLS 865S
CLAIRMONT LAKE 811S
HIGH PRAIRIE 787S
OTAUWAU 729S
A.E.C. MILL 844S
Slave Lake (SLP1)
GOODFARE 815S
PH1
POPLAR HILL 790S
MERCER HILL 728S
SOUTH BEZANSON 862S
TRIANGLE 882S
KINUSO 727S
MITSUE 732S
SLAVE LAKE 745S
eReserve9 (ERV9)
WEM1
ERV3
CRYSTAL LAKE 722S
BEAR CREEK 679S
ALBRIGHT & WILSON 752S
VALLEYVIEW 794S
SWAN RIVER 735S
SWANDIVE 854S
EDITH LAKE 739S
ELMWORTH 731S
Elmworth (NPC3)
JL Landry (NPC2)
FLYING SHOT LAKE 749S
WEY1
P&G A808S
FREEMAN LAKE 742S
Swan Hills Geothermal (SRL1)
SARAH LAKE 743S
VVW1-2
STURGEON 2 881S
VIRGINIA HILLS 738S
WAPITI 823S
CG&E 758S
GPEC
BIG MOUNTAIN 845S
GOC1
BRIDGE CREEK 798S
eReserve7-8 (ERV7-8)
GOOSE RIVER 725S
FIELDGATE 824S
Judy Creek (GEN6)
LITTLE SMOKY 813S
LOUISE CREEK 809S
MORSE RIVER 851S
FEDPIPE JUDYCREEK 515S
JUDY CREEK GAS PLANT 785S
FORT ASSINIBOINE 234S
888AL
DOME CUTBANK 810S
THORNTON 2091S
STURGEON 734S
SIMONETTE 733S
KAKWA RIDGE 857S
H.R. Milner (HRM)
H.R. MILNER 740S
MUIR 2018S
FOX CREEK 741S
ESSO JUDY CREEK 638S
526AL
NRGreen (NRG3)
Carson Creek (GENS)
CHICKADEE CREEK 259S
519L
FOX CREEK (AltaLink) 347S
PEGASUS LAKE 659S
MOBIL OIL CARSON CREEK 887S
IMPERIAL OIL CARSON LAKE 996S
LAURA LAKE 661S
BENBOW 397S
AB Newsprint (ANC1)
907L
ALBERTA NEWSPRINT 122S
MILLAR WESTERN 484S
BLUE RIDGE LUMBER 701S
CHERHILL 338S
NORTH BARRHEAD 69S
723L (to Westlock 438S)
123L (to Onoway 352S)
CHEVRON KNIGHT 355S
KAYBOB 346S
CHEVRON KAYBOB 551S
WHITECOURT 268S
WHITECOURT POWER 323S
SAGITAWAH 77S
WABAMUN 19S
905L (to North Calder 37S)
MARLBORO 348S
DEER HILL 1012S
WHITECOURT INDUSTRIAL 364S
SOUTH MAYERTHORPE 443S
2739S
Talisman Edson (TLM2)
PADDLE RIVER 106S
671L 740L
EDSON 58S
PINEDALE 207S
T.M.P.L. NITON 228S
744L
ENTWISTLE 235S
T.M.P.L. GAINFORD 165S
SUNDANCE 310P
BICKERDIKE 39S
CAS 1-2
WHISKY JACK 1047S
973L 974L
SUNDANCE 821S
12L41 (to Sunnybrook 510S)
886L (to Carvel 432S)
133L (to 522L Junction)
1045L/909L (to Junction)
902L
919L
989L
913L
1046L
156L
512L
767L (to Marion 215S)
672L (to Moon Lake 1315S)
202L (to Cynthia 716S)
847L (to Cold Creek 802S)
1150L (to Hornbeck 1345S)
740L (to Coalspur 426S)
9L02
9L05
9L56
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913L/9L913
12L41
7L230
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- Gas Generator
- Other Generator
- 69 or 72 kV Substation
- 138 or 144 kV Substation
- 240 kV Substation
- 500 kV Substation
- Future 500 kV
- HVDC Line
- Normally Open Line
- 69/72 kV
- 138/144 kV
- 138/144 kV Double Circuit
- 240 kV
- 240 kV Double Circuit
- 500 kV
- 500 kV Double Circuit
- Generation Driven
- AESO Planning Areas

Northeast Region - Long-Term Plan

This diagram contains a simplified version of the system configuration. Technical detail has been simplified for illustration purposes. It does not indicate geographical locations of facilities.

aeso

Currency Date: 2025-01-21

HORIZON MINING 838S
75-PLH-3
75-PLH-4
CNRL Horizon (CNR5)
HORIZON UPGRADING 842S
9L155
9L137
9L16
9L32
BITUMOUNT 941S
Fort Hills (FH1)
FORT HILLS 635EDD-1000
635PL9-1000
635PL9-1001
9L32
SECORD 2005S
9L101
MCCLELLAND 957S
IOR3 Kearl (IOR3)
KEARL 9900S
L9900
9L69
AURORA
Syncrude #1 (SCL1)
9L77
GREEN STOCKING 925S
9L39
BLACK FLY 934S
JOSLYN CREEK 849S
9L66
MUSKEG RIVER 847S
HARTLY 919S
JACK PINE 920S
9LJH1
9LJH2
Muskeg River (MKR1)
201-PTL260-1
201-PTL260-2
9L08
9L09
PLANT 30-2 UE-1
East Mine
DML
D05
MILDRED LAKE (Syncrude Plant 31)
RL1
RL2
9L84
29PL9-12
29PL9-13
29EDD-71
29PL7-3
29PL7-4
29PL7-5
SCR6
29EDD-65
29EDD-34
FIREBAG 29EDD-18
29PL7-1
29PL7-10
29PL7-2
29EDD-85
SCR6
29EDD-0063
29PL9-14
29PL9-15
ATHABASCA CROSSING EDD200
29PL6-14
29EDD -0056
29 EDD-7
29PL6-16
29EDD-67
29PL6-29
29EDD-93
29PL6-23
29PL6-24
29EDD-9
29EDD-8
SCR1
29EDD-22
29EDD-2
29PL6-22
29PL6-05
29PL6-06
29EDD-3
SCR1
29PL9-3/4
MILLENIUM 29EDD-1
29PL9-5
29PL9-6
HORSESHOE 737S
29EDD-10
29EDD-19
29EDD-45
29EDD-33
29EDD-19
29PL6-28
29PL6-27
29PL6-26
29PL6-23
29EDD-31
29EDD-62
29EDD-46
29EDD-84
29EDD-64
29EDD-83
MacKay River (MKRC)
DOVER 888S
9L43
MACKAY RIVER 874S
9L74
9L58
9L30
9L112
9L30
9L58
9L01
9L58
RUTH LAKE 848S
29PL9-2
29PL9-1
29PL9-16
29PL9-17
29PL6-04
6L32
29PL6-03
29PL6-20
SCR1
SCR5
SCR6
29EDD -0020
29EDD-5
29PL6-7
29PL6-02
29PL6-01
29EDD-55
VOYAGEUR 29EDD-94
29PL9-24
29PL9-25
STONEY ISLAND 29EDD-61
INGLIS ISLAND 29EDD-60
STEEPBANK 836S
DOG RIB 2082S
7L47
9L162
9L193
9L30
9L01
9L112
9L74
AMR02 937S
9L28
9L19
BIRCHWOOD CREEK 960S
YEO 2015S
9L144
THICKWOOD HILLS 951S
PARSONS CREEK 718S
7L71
7L165
HALFWAY 2014S
7LA97
TOWER ROAD 933S
7L97
9L23
9L07
9L57
12L44
AHS 01 279S
7L182
7L126
WILLOW LAKE 2009S
7L36
HANGINGSTONE 820S
7L135
SALT CREEK 977S
9L85
GERMAIN 950S
7L125
9L10
LIVOCK 939S
DAWES 2011S
7L194
7L147
SWEETHEART LAKE 2032S
7L155
GREGOIRE 883S
Nexen Inc #2 (NX02)
LONG LAKE 841S
LONG LAKE COGEN 864S
9L15 (to Wesley Creek 834S)
BRINTNELL 876S
WABASCA 720S
9L56
9L56 (to Mitsue 732S)
7L170
ALGAR 875S
7L38
HORSE RIVER 917S
7LA121
MARIANA 833S
7L121
7LB121
FREER 2043S
CROW 860S
7L121
MCMILLAN 885S
9L55
ROUND HILL 852S
1085L
1086L
KINOSIS 856S
7L15
7L104
QUIGLEY 989S
7L183
7L167
ENGSTROM 2060S
7LA183
MEADOW CREEK 2081S
KETTLE RIVER 2049S
9L45
7L05
BOHN 931S
9L990
CHARD 658S
7LA114
WADDEL 907S
7L114
LEISMER 72S
957L
CHRISTINA LAKE 723S
MEG1 Christina Lake (MEG1)
CONKLIN 762S
Christina Lake (CL01)
SUNDAY CREEK 539S
1118L
971L
1099L
BLACK SPRUCE 154S
1115L
JACKFISH 698S
1099L
1090L
MARGIE 1034S
789BL
IPIATIK 167S
1116L
PIKE 170S
1117L
428L
457L
445L
789L
WINEFRED 818S
KIRBY 651S
UNDERWOOD 183S
9L930
9L47
12L41 (to Sunnybrook 510S)
FLATBUSH 500S
724L
Westlock (WST1)
WAP-7L1
WAP 1S
723L (to North Barrhead 69S)
WESTLOCK 438S
723L
CLYDE 150S
223L
COLINTON 159S
710L
APF Athabasca (AFG1)
GRASSLAND 282S
FLAT LAKE 242S
796AL
796L
WAUPISOO 405S
633L
BOYLE 56S
PLAMONDON 353S
728L
728L
THOMPSON 140S
788AL
788L
LAC LA BICHE 157S
794L
9L22
9L81
HEART LAKE 898S
ABEE 993S
7L437
WEASEL CREEK 947S
7LA808
WHITEFISH LAKE 825S
9L36/9L37 (to Marguerite Lake 826S)
792L (to N.W. Cardiff 191S)
REDWATER 171S
808AL
808L
1054L
1061L
1054L
943L
9L960
9L961
HEARTLAND 12S
12L70
12L85
HEATHFIELD 2029S
735L
DEERLAND 13S
13L50
794L (to Whitby Lake 819S)
1206L/1212L (to Ellerslie 89S)
GRANITE 342S
TC02
RIVERSIDE 388S
BANNERMAN 681S
BEAMER 233S
1061L
1120L
1061L
943L
OPAL 439S
SCORIA 318S
708AL
942L
1061L
807L
SHELL AOSP 402S
1120L
943L
AMELIA 108S
ALC03L
815L
LAMOUREUX 71S
708L
942L
997L
C.U.B. 672S
URSUS 430S
942L
1120L
807AL
EX1 -01L
SCOTFORD UPGRADER 879S
AIR LIQUIDE 408S
726L (to North Calder 37S)
920L (to Castle Downs)
921L (to Clover Bar 987S)
761L (to East Edmonton 38S)
861L
HRT1
APS1
ALC02L
SCOTFORD 409S
ALS1
ALC01L
856L
857L
DHC 258S
787L
DOWG
899L
JOSEPHBURG 410S
862L
856L
857L
781L
SHERRITT GORDON 172S
787AL
FORT SASK. CO-GEN 218S
ROSS CREEK 906S
DOW CHEMICAL FORT SASK. 166S
776L
773L
BRUDERHEIM 127S
ALBCHEM BEAVERHILL CREEK 308S
846L
776L
706L
B.F.GOODRICH FORT SASK. 452S
700L (to Sherwood Park 746S)
WESTWOOD 422S
709L
707L
FORT SASK. 54S
694L
706L
706AL
CANADIAN OXY ASTOTIN CREEK 365S
EATL 13L50 (to Newell 2075S)
25 - Fort McMurray
27 - Athabasca / Lac La Biche
28 - Cold Lake
33 - Fort Saskatchewan
56 - Vegreville
60 - Edmonton

Edmonton Region - Long-Term Plan

This diagram contains a simplified version of the system configuration. Technical detail has been simplified for illustration purposes. It does not indicate geographical locations of facilities. For clarity the City of Edmonton and East Edmonton are shown as insets.

Currency Date: 2025-01-21

Load Driven
Solar Generator
Gas Generator
Future 240 kV Substation
Substation to be Decommissioned
69 or 72 kV Substation
138 or 144 kV Substation
240 kV Substation
500 kV Substation
Future 69/72 kV
Future 240 kV
Line to be Decommissioned
Increase Line Rating
HVDC Line
Normally Open Line
69/72 kV
69/72 kV Double Circuit
69/138 kV Double Circuit
138/144 kV
138/144 kV Double Circuit
240 kV
240 kV Double Circuit
240 kV Double Circuit One Side Open
500 kV
500 kV Double Circuit
AESO Planning Areas

26 - Swan Hills
40 - Wabamun
27 - Athabasca / Lac La Biche
30 - Drayton Valley
33 - Fort Saskatchewan
60 - Edmonton
31 - Wetaskiwin

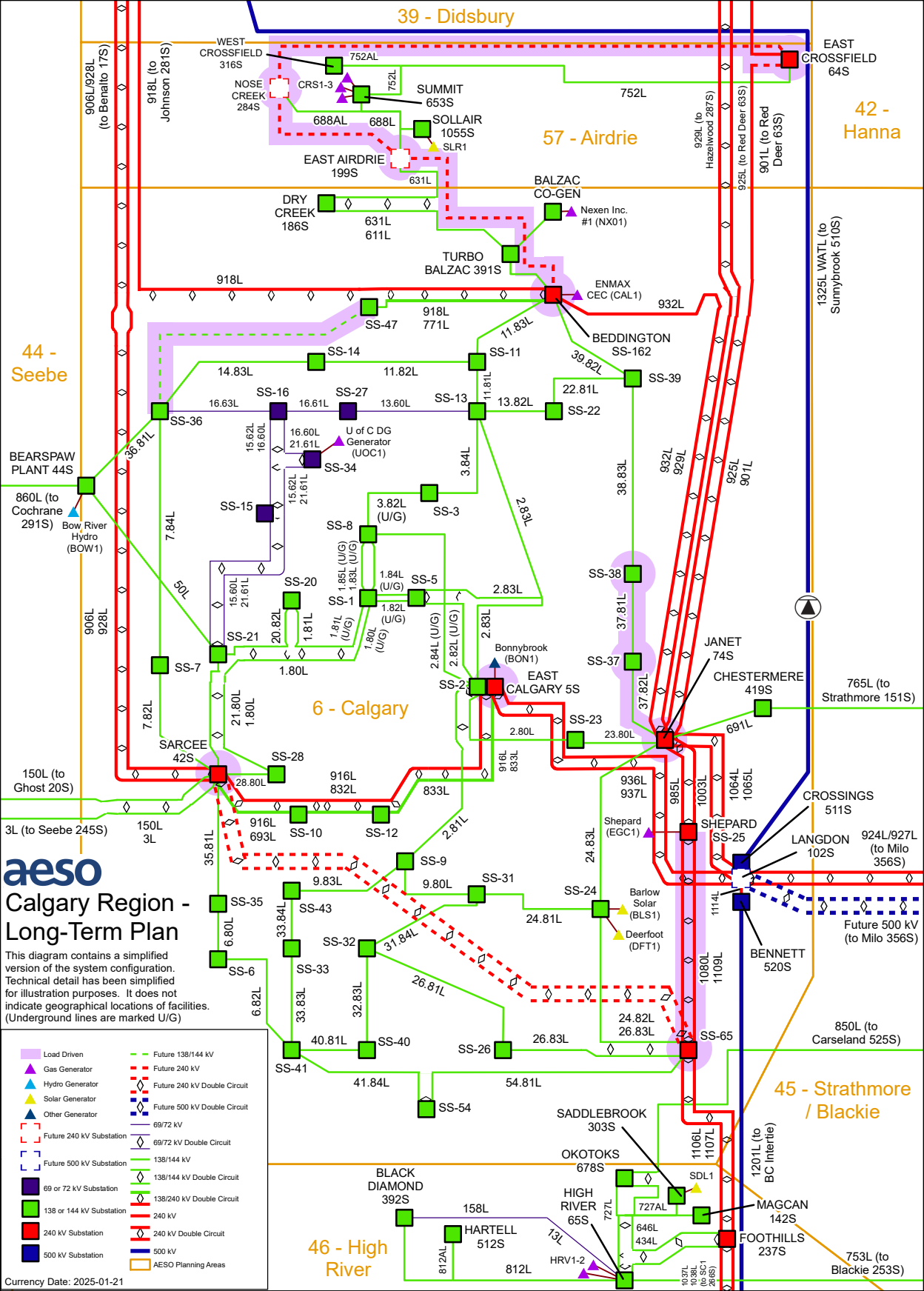
888AL FORT ASSINIBOINE 234S
7L230 (to Sarah Lake 743S)
913L (to Mitsue 732S)
12L41 (to Livock 938S)
NORTH BARRHEAD 69S
723L (to Westlock 438S)
913L
799L (to Sagitawah 77S)
SOUTH MAYERTHORPE 443S
799L
919L/989L (to Sagitawah 77S)
ENTWISTLE 235S
156L
T.M.P.L. GAINFORD 165S
156BL
744L (to Paddle River 106S)
919L
989L
973L
974L
973L/974L (to Bickerdike 39S)
672L (to Moon Lake 131S)
WABAMUN 2739S
124L
CHERHILL 338S
1046L
123L
ONOWAY 352S
WABAMUN 19S
905L
896L
1046L
902L
139L
234L
521L
SUNDANCE 821S
512L
MARION 21S
767AL
767L
Sundance #6 (SD6)
1045L
SUNDANCE 310P
909L
1045AL
KEEPHILLS 320P
1202L
1203L
SUNDANCE BLOW-DOWN 867S
521AL
Keephills 2-3 (KH2-KH3)
767L
767CL
834L
522L
NEW ROSE VALLEY 635S
922L/926L (to Benalto 17S)
CARVEL 432S
790AL
BILBY 105S
790L
STONY PLAIN 434S
452L
HARRY SMITH 367S
1139L
1043L
1202L
522AL
KEEPHILLS/SUNDANCE MAKE-UP 866S & 868S
1045L 909L
1044L 909L
1238L
1239L
GENESEE 330p
1209L
430L
Genesee #3 (GN3)
Genesee Repower 1-2 (GNR1-2)
SUNNYBROOK 510S
834L (to Keystone 384S)
809L
739L
190L/903L (to Benalto 17S)
1325L/WATL (to Langdon 102S)
792L (to Clyde 150S)
N.W. CARDIFF 191S
792L
VISCOUNT 92S
NORTH ST. ALBERT 99S
747L
712L
898L
747L
CASTLE DOWNS 920L
726L (to Lamoureux 71S)
1206L/1212L (to Heartland 12S)
920L/921L (to Lamoureux 71S)
761L (to Lamoureux 71S)
SPRUCE GROVE 595S
677L
POUNDMAKER
ACHESON 305S
446L
453L
930L
711L
NORTH CALDER 37S
INLAND CEMENT
VICTORIA
240CV5
1098L
1045L
JASPER 805S
BELLAMY
240BA2
240BA3
ARGYLL
RIVERVIEW
1044L
PETROLIA
KKP1-2
1055L
1056L
1044L
908L
DOME
908L
909L
ELLERSLIE 89S
BLACKMUD 155S
739L
838L
DEVON 14S
LEDUC 325S
604L
1112L
1140L
BUFORD 538S
632L
838L
632L
NISKU 149S
454L
455L
SAUNDERS LAKE 289S
838L
837L
PIGEON LAKE 964S
805L
910L
914L
858L
803L
804L
BIGSTONE 86S
804L
858L
WETASKIWIN 40S
729AL
TRUWELD GRATING 6500S
729L
ERVICK 542S
730L
Camrose (CRG1)
EAST CAMROSE 285S
732L
KINGMAN 299S
732AL
QUEENSLAND 301S
174L
BARDO 197S
174L (to North Holden 395S)
780L
174L
COOKING LAKE 522S
874L
BRETONA 45S
897L
780L
CLOVER BAR 987S
Cloverbar 1-3 (ENC1-3)
921L
915L
947L
FIBERGLASS
746AL
746BL
CANADA LIQUID AIR 337S
636L
BROADMOOR 420S
731L
SHERWOOD PARK 746S
746L
700L
WESTWOOD 422S
694L
FORT SASK. 54S
708L (to Sherrit Gordon 721S)
707L (to Dow Chemical Fort Saskatchewan 166S)
706L (to Josephburg 410S)
PONOKA 331S
421L
422L
WOLF CREEK 288S
883L
NELSON LAKE 429S
1083L/914L (to Red Deer 63S)

East Edmonton Inset

CLOVER BAR 987S
Cloverbar 1-3 ENC1-3)
921L (to Lamoureux 71S)
761L (to Lamoureux 71S)
IMPERIAL OIL EDMONTON 95S
Strathcona (IOR4)
737L
761L
BRETVILLE 185S
605L
YASA 286S
PETRO-CANADA EDMONTON 184S
606L
915L
947L
AT PLASTIC 4RS
738L
ANTHONY HENDAY 309S
705L
738AL
AT PLASTIC 5RS
EAST EDMONTON 38S
215L
KNIGHTSBRIDGE 216S
741L
865L
822L
731L
BASELINE 317S
STELCO EDMONTON 133S
822AL
1059L
908L
736L
731L (to Broadmoor 420S)
72LH8 (to Hardisty)
EAST INDUSTRIAL
908AL
1059AL
BERNESE 293S
South Edmonton Terminal (SET1)
72LS24 (to Strathcona)
LAMBTON
1059L
1058L
1206L/1212L (to Heartland 12S)
780L
897L
ELLERSLIE 89S
1057L
908L
SUMMERSIDE 657S
1058L
908L
BRETONA 45S
897L
946L
947L
874L (to Cooking Lake 522S)
780L (to Cooking Lake 522S)

City of Edmonton Inset (U/G = Underground Line)

920L (to North Calder 37S)
CASTLE DOWNS
920L (to Lamoureux 71S)
72NK23 (U/G)
KENNEDALE
72CK12 (U/G)
72CK13 (U/G)
921L (to Lamoureux 71S)
Cloverbar #1-3 (ENC1-3)
CLOVER BAR 987S
WOODCROFT (Normally Open Point within Substation)
72NW15
NAMAO
72CN10 (U/G)
72CH9 (U/G)
72JW19 (U/G)
72CH11 (U/G)
1098L (to Poundmaker)
1045L (to Sundance 310P)
JASPER 805S
240CV5 (U/G)
72VN21 (U/G)
72RW3 (U/G)
Fort Road
1044L (to Petrolia)
VICTORIA 511S
HARDISTY
915L
EAST EDMONTON 38S
72RV4 (U/G)
72RV6 (U/G)
72RV2 (U/G)
1059L
908L
EAST INDUSTRIAL
ROSSDALE
University of Alberta (UOA1)
72RG1 (U/G)
72RG7 (U/G)
BELLAMY (U/G)
240BA2 (U/G)
240BA3 (U/G)
72PM25L (to Poundmaker)
72MG16 (U/G)
72JM18 (U/G)
MEADOWLARK
GARNEAU
ARGYLL
LAMBTON
1059L
STRATHCONA
72LS24
1058L
72DS24 (to Dome)
1055L (to Petrolia)
1056L (to Ellerslie 89S)
1058L (to Summerside 657S)
908L (to Ellerslie 89S)
946L/947L (to Ellerslie 89S)


39 - Didsbury
42 - Hanna
57 - Airdrie
44 - Seebe
6 - Calgary
45 - Strathmore / Blackie
46 - High River
WEST-CROSSFIELD 316S
752AL
NOSE CREEK 284S
CRS1-3
752L
SUMMIT 653S
752L
EAST CROSSFIELD 64S
906L/928L (to Benalto 17S)
918L (to Johnson 281S)
688AL
688L
SOLLAIR 1055S
SLR1
929L (to Hazelwood 287S)
925L (to Red Deer 63S)
901L (to Red Deer 63S)
EAST AIRDRIE 199S
631L
BALZAC CO-GEN
Nexen Inc. #1 (NX01)
DRY CREEK 186S
631L
611L
TURBO BALZAC 391S
1325L WATL (to Sunnybrook 510S)
918L
ENMAX CEC (CAL1)
932L
SS-47
918L
771L
11.83L
BEDDINGTON SS-162
SS-14
SS-11
39.82L
SS-39
14.83L
11.82L
11.81L
22.81L
SS-16
SS-27
SS-13
13.82L
SS-22
16.63L
16.61L
13.60L
SS-36
36.81L
15.62L
16.60L
16.60L
21.61L
U of C DG Generator (UOC1)
SS-34
BEARSPAW PLANT 44S
860L (to Cochrane 291S)
Bow River Hydro (BOW1)
SS-15
15.62L
21.61L
3.84L
SS-3
3.82L (U/G)
2.83L
38.83L
932L
929L
925L
901L
SS-8
1.85L (U/G)
1.83L (U/G)
1.84L (U/G)
SS-5
SS-38
SS-20
SS-1
1.82L (U/G)
2.83L
37.81L
906L
928L
SS-21
20.82L
1.81L
1.81L (U/G)
1.80L (U/G)
2.84L (U/G)
2.82L (U/G)
2.83L
Bonnybrook (BON1)
JANET 74S
SS-7
1.80L
SS-37
CHESTERMERE 419S
765L (to Strathmore 151S)
7.82L
21.80L
1.80L
SS-2
EAST CALGARY 5S
37.82L
691L
SARCEE 42S
SS-28
SS-23
2.80L
23.80L
916L
833L
150L (to Ghost 20S)
28.80L
916L
832L
833L
936L
937L
985L
1003L
1064L
1065L
CROSSINGS 511S
3L (to Seebe 245S)
150L
3L
916L
693L
SS-10
SS-12
2.81L
Shepard (EGC1)
SHEPARD SS-25
924L/927L (to Milo 356S)
35.81L
SS-9
24.83L
LANGDON 102S
9.83L
9.80L
SS-31
SS-24
Barlow Solar (BLS1)
1114L
SS-35
SS-43
24.81L
Deerfoot (DFT1)
Future 500 kV (to Milo 356S)
6.80L
33.84L
SS-32
31.84L
BENNETT 520S
SS-6
SS-33
1080L
1109L
26.81L
6.82L
33.83L
32.83L
24.82L
26.83L
SS-65
850L (to Carseland 525S)
40.81L
SS-40
SS-26
26.83L
SS-41
41.84L
54.81L
45 - Strathmore / Blackie
SS-54
SADDLEBROOK 303S
1106L
1107L
1201L (to BC Intertie)
OKOTOKS 678S
SDL1
BLACK DIAMOND 392S
158L
HIGH RIVER 65S
727L
727AL
MAGCAN 142S
646L
434L
FOOTHILLS 237S
HARTELL 512S
13L
812AL
812L
HRV1-2
753L (to Blackie 253S)
46 - High River
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Calgary Region - Long-Term Plan
This diagram contains a simplified version of the system configuration. Technical detail has been simplified for illustration purposes. It does not indicate geographical locations of facilities. (Underground lines are marked U/G)
Load Driven
Gas Generator
Hydro Generator
Solar Generator
Other Generator
Future 240 kV Substation
Future 500 kV Substation
69 or 72 kV Substation
138 or 144 kV Substation
240 kV Substation
500 kV Substation
Future 138/144 kV
Future 240 kV
Future 240 kV Double Circuit
Future 500 kV Double Circuit
69/72 kV
69/72 kV Double Circuit
138/144 kV
138/144 kV Double Circuit
138/240 kV Double Circuit
240 kV
240 kV Double Circuit
500 kV
AESO Planning Areas
Currency Date: 2025-01-21

South Region - Long-Term Plan

This diagram contains a simplified version of the system configuration. Technical detail has been simplified for illustration purposes. It does not indicate geographical locations of facilities. For detail on the Calgary Area please see the Calgary Region diagram.

Generation Driven
Gas Generator
Hydro Generator
Solar Generator
Wind Generator
Other Generator
Future 240 kV Substation
Future 500 kV Substation
69 or 72 kV Substation
138 or 144 kV Substation
240 kV Substation
500 kV Substation
Future 138/144 kV
Future 240 kV
Future 240 kV Double Circuit
Future 500 kV Double Circuit
HVDC Line
Normally Open Line
69/72 kV
138/144 kV
138/144 kV Double Circuit
240 kV
240 kV Double Circuit
500 kV
AESO Planning Areas

Alberta Electric System Operator

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01/25