

addline_NLAX-HLT-SPG-WMD_345-kV[1].idv

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TEXT Author: Todd Tadych

TEXT Rev Date: October 29, 2008 (Updated 6 Digit Bus Numbers)

TEXT Rev Date: October 24, 2008 (Updated 69 kV section between WMD and Mount Horeb)

TEXT Description: Modifies the 2007 Series MRO 2017 SP case to add:

TEXT 345 kV line from North La Crosse to Hilltop

TEXT 345 kV line from Hilltop to Spring Green

TEXT 345 kV line from Spring Green to West Middleton

TEXT 138 kV line from Council Creek to Hilltop

TEXT 138 kV line from Hilltop to Birchwood

TEXT 138 kV line from Spring Green to West Middleton

TEXT Conductor Used: 345 kV - ACSS 954.0 2 54/7

TEXT 138 kV - ACSR T2 447 1 26/7

TEXT 69 kV - ACSR 336.4 1 26/7

TEXT Conductor Note: Impedance for bundled ACSS 954.0 was approximated by using the impedance calculator values for ACSR 954 2 54/7

TEXT Structure Used: Double circuit steel pole from North La Crosse to West Middleton. 345 kV line with other position vacant from North La Crosse to Council Creek; 345/138 kV line from Council Creek to Hilltop; 345/138 kV line from Hilltop to Birchwood; 345 kV line with other position vacant from Birchwood to Spring Green; 345/138 kV line from Spring Green to West Middleton.

TEXT 345 kV DCSP: OH-35A-345

TEXT 69 kV SCWP: OH-S3-69

TEXT

TEXT Rev 2: November 7, 2008 (Tom Dagenais)

TEXT Based on discussions with DPC, retain 69 kV path from Council Creek to West Mauston and build new 138 kV from Council Creek to Hilltop (rather than conversion of 69 kV from COC to Hilltop to 138 kV). New 138kV line length is ~28 miles. ACSR T2 Hawk conductor assumed.

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TEXT Added removal of branches from Mazomanie West 69 kV sub, changed voltage of Mazomanie West to 138 kV, and inserted 138 kV branches Arena-Mazomanie West-Mazomanie Industrial so that IDEV matches configuration of current Powerflow models.

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TEXT Note: Structure used for Arena-Mazomanie West-MZI was assumed to be ATC structure OH-35A-345 in order to match previous impedance calculations for the Arena - MZI path.

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TEXT Rev 3: November 25, 2008 (Todd Tadych)

TEXT Changed modeling of 69 kV connections between WMD and Mount Horeb.

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TEXT PURG,SI

1

698127,698128,1 /* Remove SPG 69-ARE 69

1

698128,693657,1 /* Remove ARE 69-MZOMN W 69

1

693657,699929,1 /* Remove MZOMN W 69-MZI 69

1

699929,698129,1 /* Remove MZI 69-MAZ 69

1

698129,698130,1 /* Remove MAZ 69-BLE 69

1

698130,698131,1 /* Remove BLE 69-STG 69

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addline_NLAX-HLT-SPG-WMD_345-kv[1].idv
1
698131,693889,1          /* Remove STG 69-MTHRB_NE
1
698131,698133,1          /* Remove STG 69-TLT 69
1
698131,698686,1          /* Remove STG 69-CSP 69
1
0
RDCH
1
693665,'HLT 345',345.,1,,694,1684,,,693          /* Hilltop 345 kv
Bus
693666,'HLT 138',138.,1,,694,1684,,,693          /* Hilltop 138 kv
Bus
693668,'SPG 345',345.,1,,694,1684,-40.0,693      /* Spring Green 345
kv Bus
698128,'ARE 138',138.,1,,,,,          /* Change kv on ARE
Bus
693657,'MAZOMN W',138.,1,,,,,          /* Change kv on MZW
Bus
699929,'MZI 138',138.,1,,,,,          /* Change kv on MZI
Bus
698129,'MAZ 138',138.,1,,,,,          /* Change kv on MAZ
Bus
698130,'BLE 138',138.,1,,,,,          /* Change kv on BLE
Bus
698131,'STG 138',138.,1,,,,,          /* Change kv on STG
Bus
0          /* End of Bus Data
0          /* End of Load Data
0          /* End of Generator Data
693665,601044,'1 ',0.00314,0.03752,0.62674,2110,2110,2110,,,,,1,75,693,1.0,,,,,
/* North La Crosse-Hilltop 345 kv (75 miles)
693665,693668,'1 ',0.002306,0.027518,0.459611,2110,2110,2110,,,,,1,55,693,1.0,,,,,
/* Hilltop-Spring Green 345 kv (55 miles)
693668,699829,'1 ',0.001174,0.014009,0.233984,2110,2110,2110,,,,,1,28,693,1.0,,,,,
/* Spring Green-west Middleton 345 kv (28 miles)
698945,693666,'1 ',0.01117,0.09127,0.02204,348,481,552,,,,,1,22,693,1.0,,,,,
/* Birchwood-Hilltop 138 kv (22 miles)
693666,699239,'1 ',0.01524,0.12446,0.03006,348,481,552,,,,,1,28,691,1.0,,,,,
/* Hilltop-Council Creek 138 kv (28 miles)
699114,698128,'1 ',0.00355,0.02904,0.00701,348,481,552,,,,,1,7,693,1.0,,,,,
/* Spring Green-Arena 138 kv (7 miles)
698128,693657,'1 ',0.00254,0.02074,0.00501,348,481,552,,,,,1,5,693,1.0,,,,,
/* Arena-Mazomanie West 138 kv (5 miles)
693657,699929,'1 ',0.00051,0.00415,0.00100,348,481,552,,,,,1,1,693,1.0,,,,,
/* Mazomanie West-Mazomanie Industrial 138 kv (1 mile)
699929,698129,'1 ',0.00102,0.00830,0.00200,348,481,552,,,,,1,2,693,1.0,,,,,
/* Mazomanie Industrial-Mazomanie 138 kv (2 miles)
698129,698130,'1 ',0.00203,0.01659,0.00401,348,481,552,,,,,1,4,693,1.0,,,,,
/* Mazomanie-Black Earth 138 kv (4 miles)
698130,698131,'1 ',0.00355,0.02904,0.00701,348,481,552,,,,,1,7,693,1.0,,,,,
/* Black Earth-Stage Coach 138 kv (7 miles)
698131,699820,'1 ',0.00203,0.01659,0.00401,348,481,552,,,,,1,4,693,1.0,,,,,
/* Stage Coach-west Middleton 138 kv (4 miles)
698133,698686,'1 ',0.01432,0.03675,0.00072,84,95,116,,,,,1,2.5,693,1.0,,,,,
/* Timberline Tap-Cross Plains 69 kv (2.5 miles)
698133,698134,'1 ',0.06876,0.17642,0.00347,84,95,116,,,,,1,12,693,1.0,,,,,
/* Timberline Tap-Mount Horeb 69 kv (12 miles)
0          /* End of Non-Transformer Branch Data
693665,693666,0,'1 ',1,1,1,0.00140,0.00000,2,'HLT 345',1,691,1.0000          /*
Hilltop 345/138 xfmr 1

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                                addline_NLAX-HLT-SPG-WMD_345-kv[1].idv
0.00030,0.02110,100.00 /*
Hilltop 345/138 xfmr 1
1.025,0.00,0.00,500.0,500.0,0,0,1.50,0.51,1.50,0.51,33,0,0.00,0.00 /*
Hilltop 345/138 xfmr 1
1.00,0.000 /*
Hilltop 345/138 xfmr 1
693666,698333,0,'1 ',1,1,1,0.00000,0.00000,2,'HLT 138',1,691,1.0000 /*
Hilltop 138/69 xfmr 1
0.00106,0.03949,100.00 /*
Hilltop 138/69 xfmr 1
1.000,0.00,0.00,186.70,186.70,0.0,0,0,1.50,0.51,1.50,0.51,33,0,0.00,0.00 /*
Hilltop 138/69 xfmr 1
1.00,0.000 /*
Hilltop 138/69 xfmr 1
693668,699114,0,'1 ',1,1,1,0.00140,0.00000,2,'SPG 345',1,693,1.0000 /*
Spring Green 345/138 xfmr 1
0.00030,0.02110,100.00 /*
Spring Green 345/138 xfmr 1
1.025,0.00,0.00,500.0,500.0,500.0,0,0,1.50,0.51,1.50,0.51,33,0,0.00,0.00 /*
Spring Green 345/138 xfmr 1
1.00,0.000 /*
Spring Green 345/138 xfmr 1
0 /* End of Transformer Data
Q
@end

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