



Avangrid
November 15, 2022

Railroad Corridor Transmission Line Asset Condition Assessment Update

Presentation to:
Planning Advisory Committee (PAC) Meeting

Zach Logan
Manager Project Development (NE)

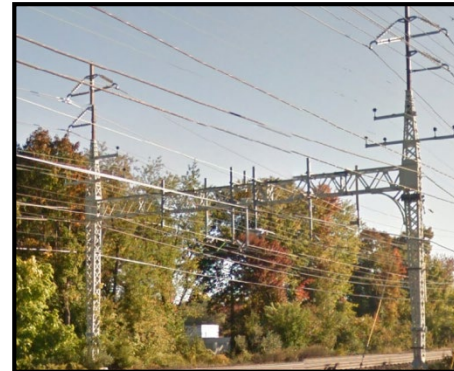
Today's Presentation

Objective:

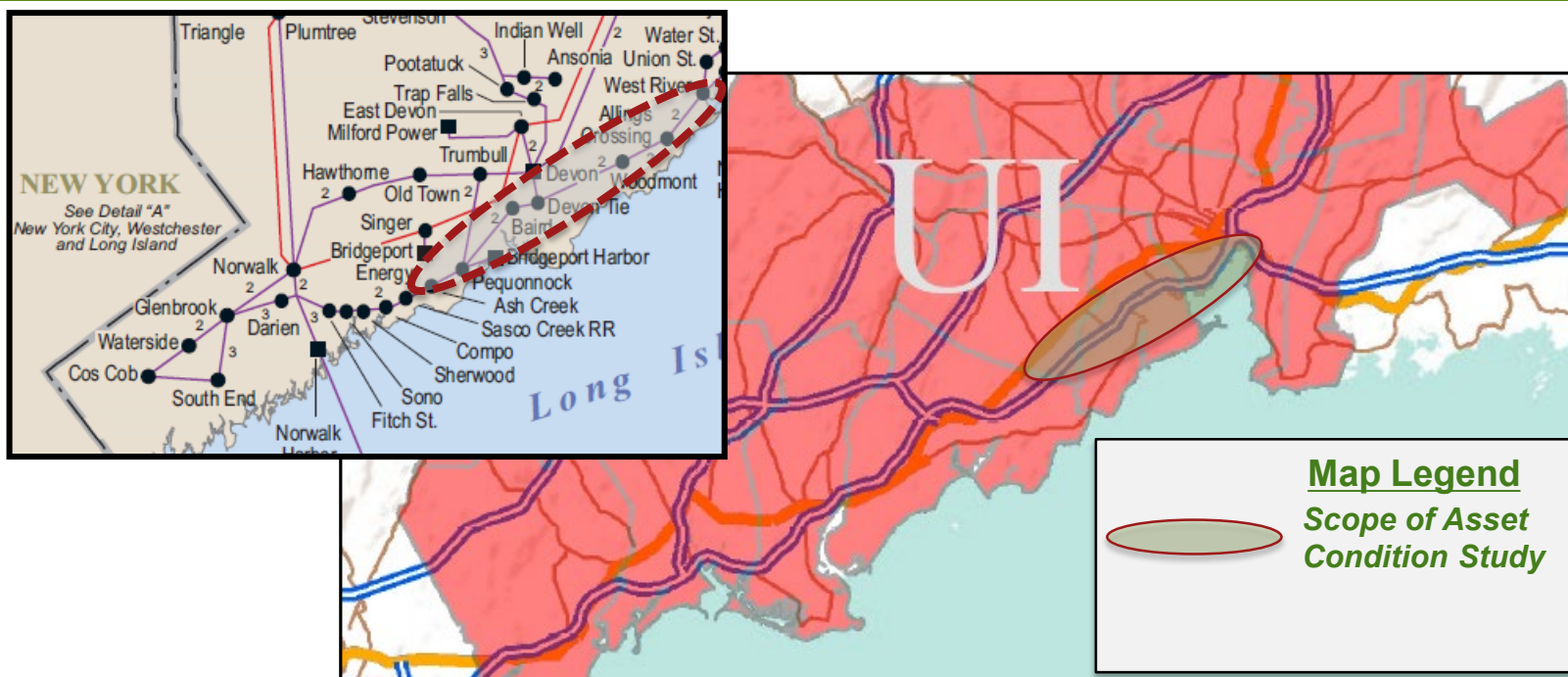
Provide an update on the Milvon to West River Segment.

Agenda:

- Background
- Alternatives
- Cost Breakdown



Background – Geographic



Line Segment	Circuit ID's	Circuit Mileage
Milvon – West River	88005A/B, 8804A/B, 88003A/B	19.0

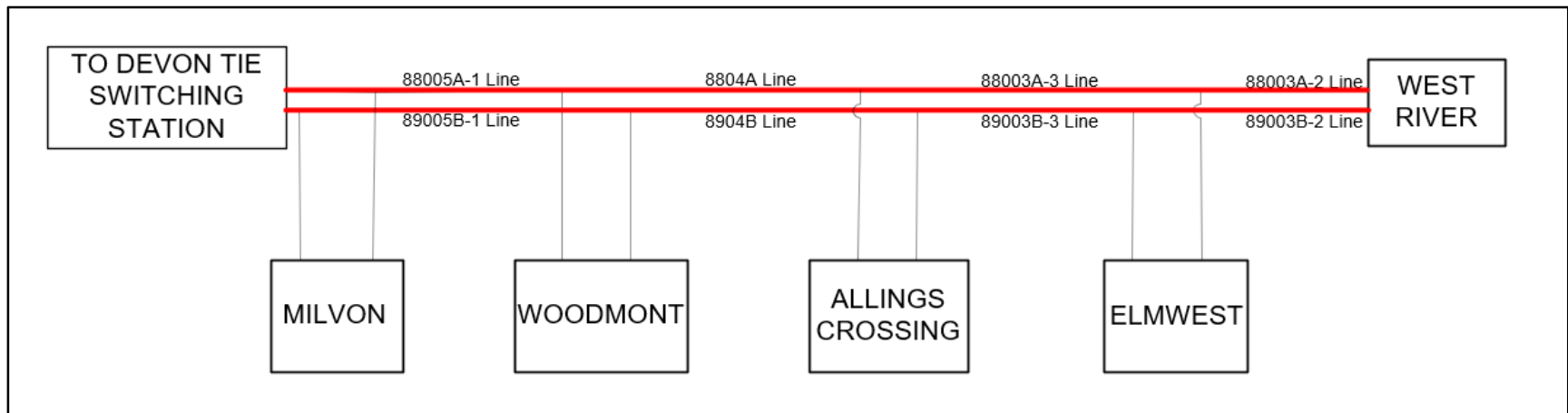
Previous ISO Presentation (presented June 13, 2018):

https://smd.iso-ne.com/operations-services/ceii/pac/2018/06/a4_railroad_corridor_transmission_line_asset_condition.pdf

This assessment addresses all known remaining UI 115 kV transmission asset condition concerns along the RR corridor. These concerns include corrosion loss, corrosion expansion, missing members, and additional loads being applied to structures.

Alternatives

Milvon – West River Solution Alternatives (+50/-25% Level)		
Solution Alternative	2018 Cost	2022 Cost
Double Circuit Tower (Preferred Alternative)	\$196.6M	\$345.4M
Monopole	\$245.6M	\$399M



Cost Breakdown

	2018 Estimate, \$M				2022 Estimate, \$M				Net \$M Variance*	Comments
	PTF	Non-PTF	Total	%	PTF	Non-PTF	Total	%		
Material	15.2	0.0	15.2	8%	14.9	0.0	14.9	4%	-0.2	Continue to update based on either updated contracts or market price (i.e., metals)
Labor & Equipment	54.5	0.0	54.5	28%	100.8	0.0	100.8	29%	46.3	Increase in cost is primarily due to the price escalation and inflation along with shift of contingency dollars due to design status. Additionally, construction scope is more complex than was assumed in 2018 along with understanding of Project has grown from conceptual stage in 2018 to 90% design in 2022. Value does not include final Construction estimate (this is anticipated in end of Q3/beginning of Q4 2022)
Right of Way	5.9	0.0	5.9	3%	16.8	0.0	16.8	5%	10.9	Significant increase needed from 2018 to 2022 on easements (permanent 2.7 to 17 acres and temporary .3 to 19 acres)
Engineering/Permitting/ Indirect	65.0	0.0	65.0	33%	125.4	0.0	125.4	37%	60.4	Increase is from more clear understanding of environmental conditions (wetland impact - temp vs permanent, species, stormwater inspections relative to timing to indirect, cultural resources).
Escalation	13.0	0.0	13.0	7%	3.8	0.0	3.8	1%	-9.2	
AFUDC	28.9	0.0	28.9	15%	59.5	0.0	59.5	17%	30.6	Increase due to current AFUDC rates versus 2018
Contingency	14.2	0.0	14.2	7%	24.2	0.0	24.2	7%	10.0	
Total	196.6	0.0	196.6	100%	345.4	0.0	345.4	100%	148.8	

*may not exactly sum due to rounding

Questions

