

Appendix K

Electrification Analysis

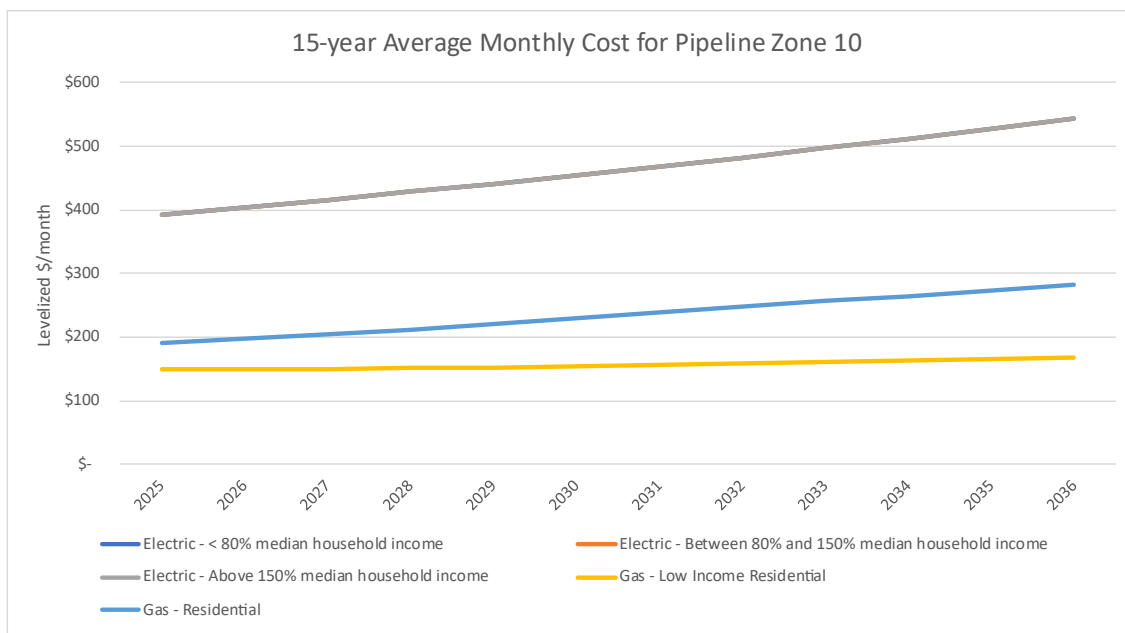
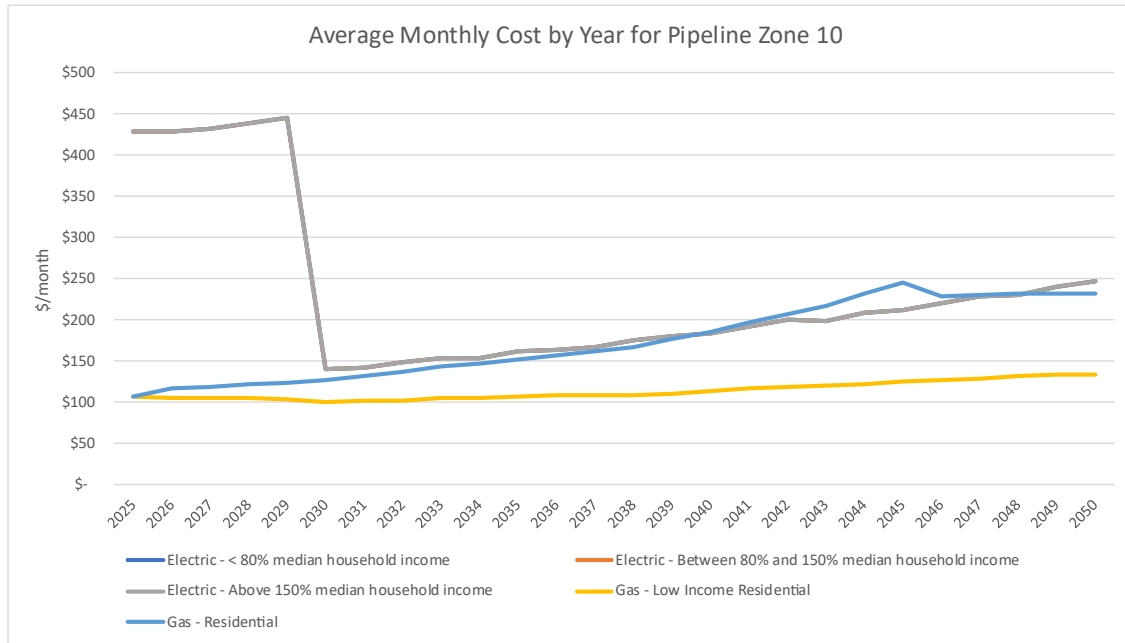
2025 WA IRP

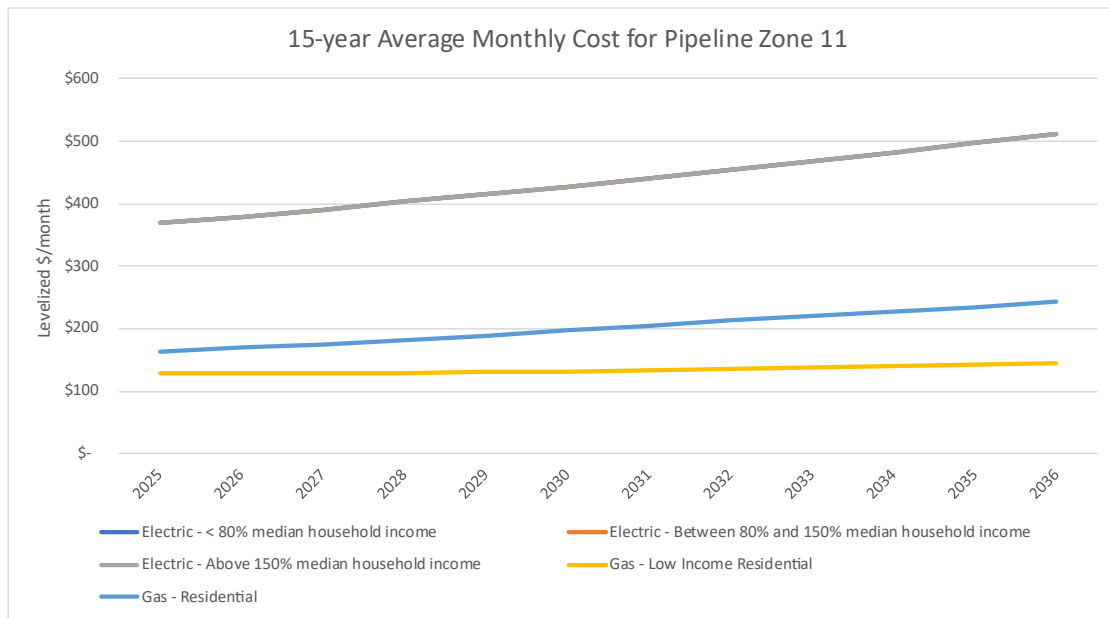
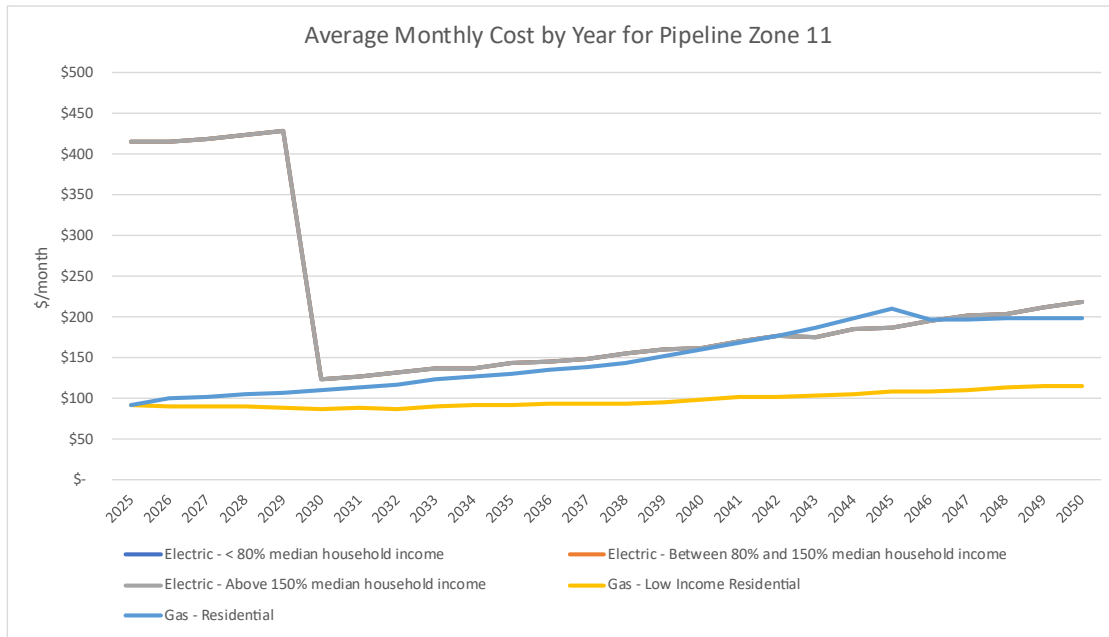
Appendix K – Introduction

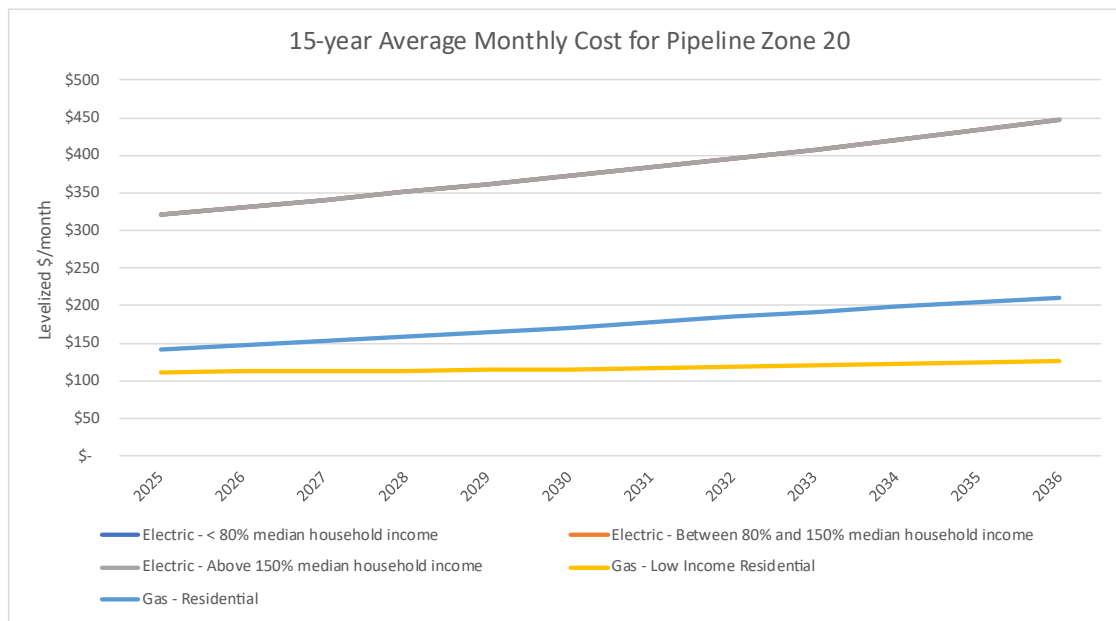
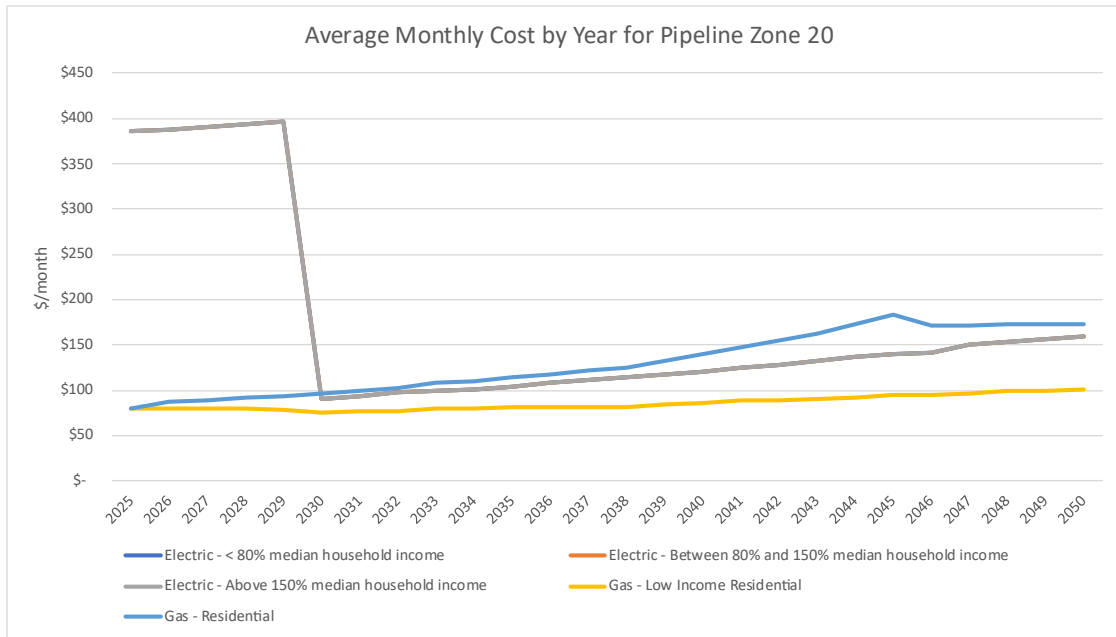
The purpose of this appendix is to provide electrification results by a combination of each pipeline zone and reference case, low growth, and high growth. Cascade has also provided the results from a Company perspective, or a utility cost test perspective, and a customer perspective. Under the customer perspective, Cascade included the marginal cost of a furnace, or in other terms, the cost difference between and heat pump and furnace as the install cost.

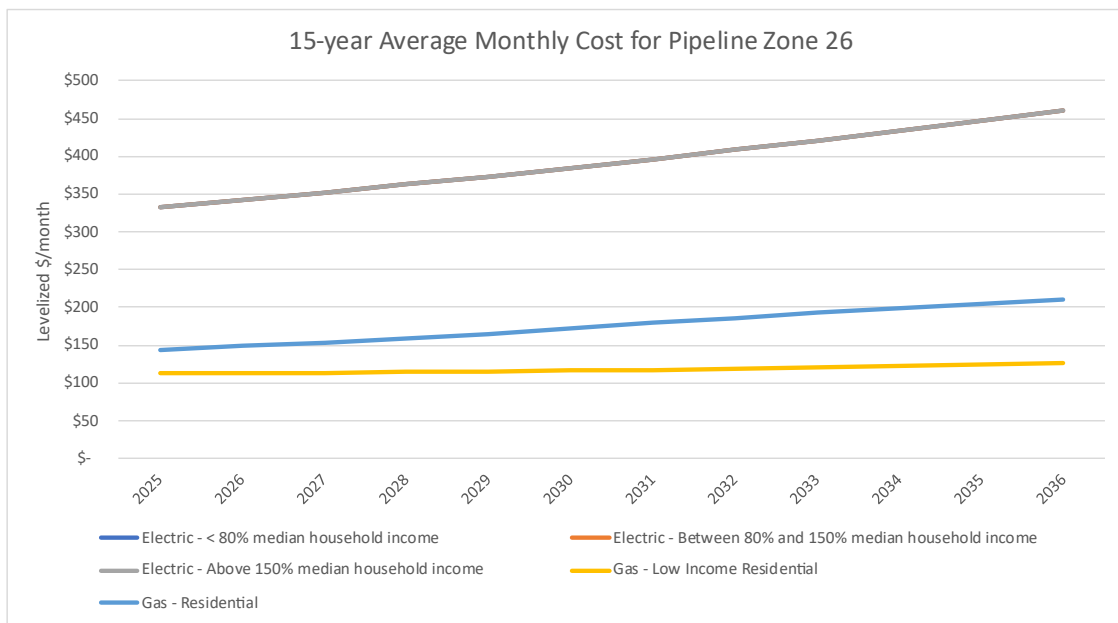
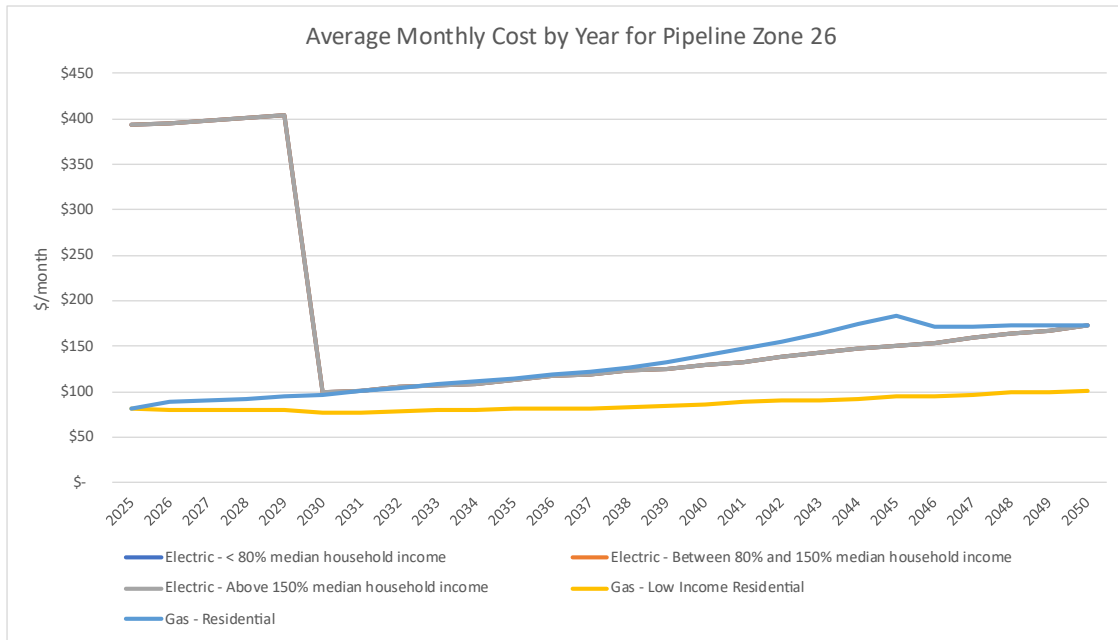
Reference Case – Company Perspective (Furnace Cost Reduction Not Included)

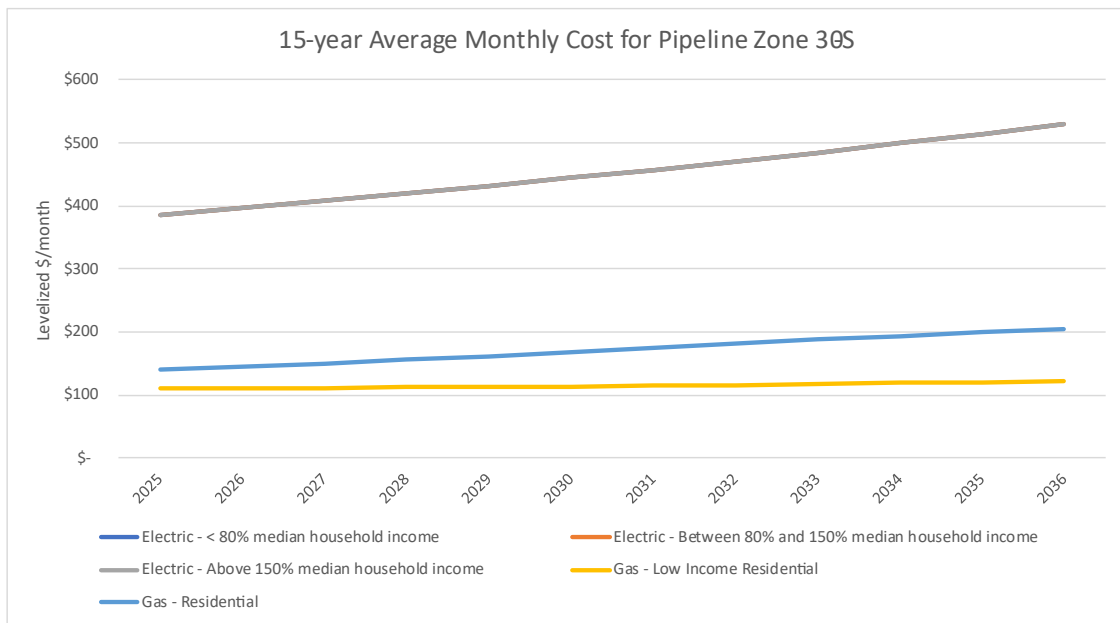
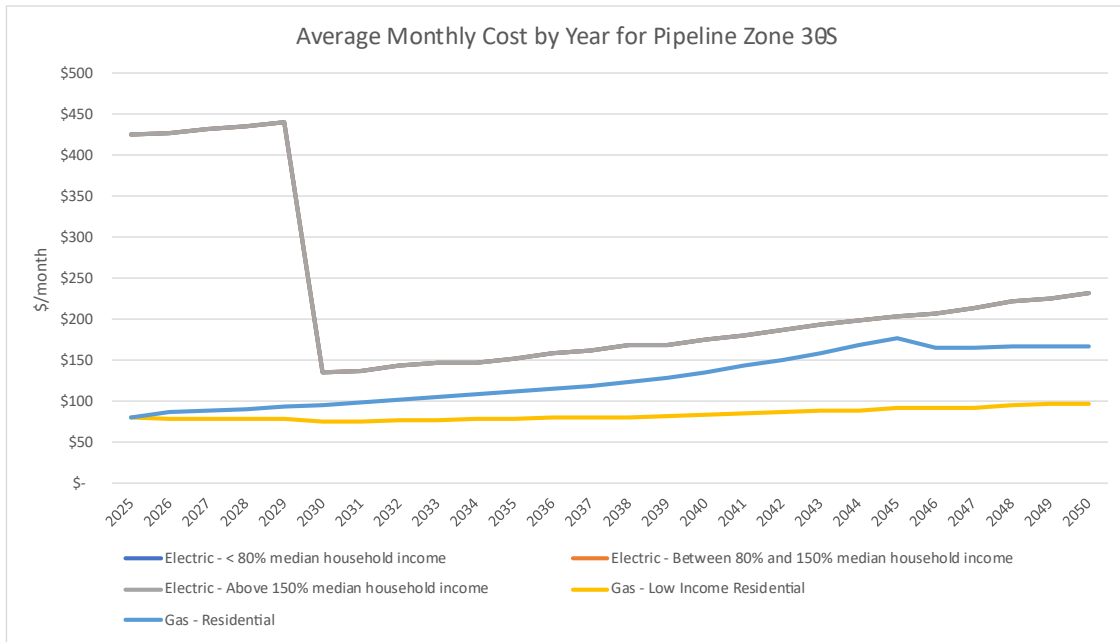
Zone 10

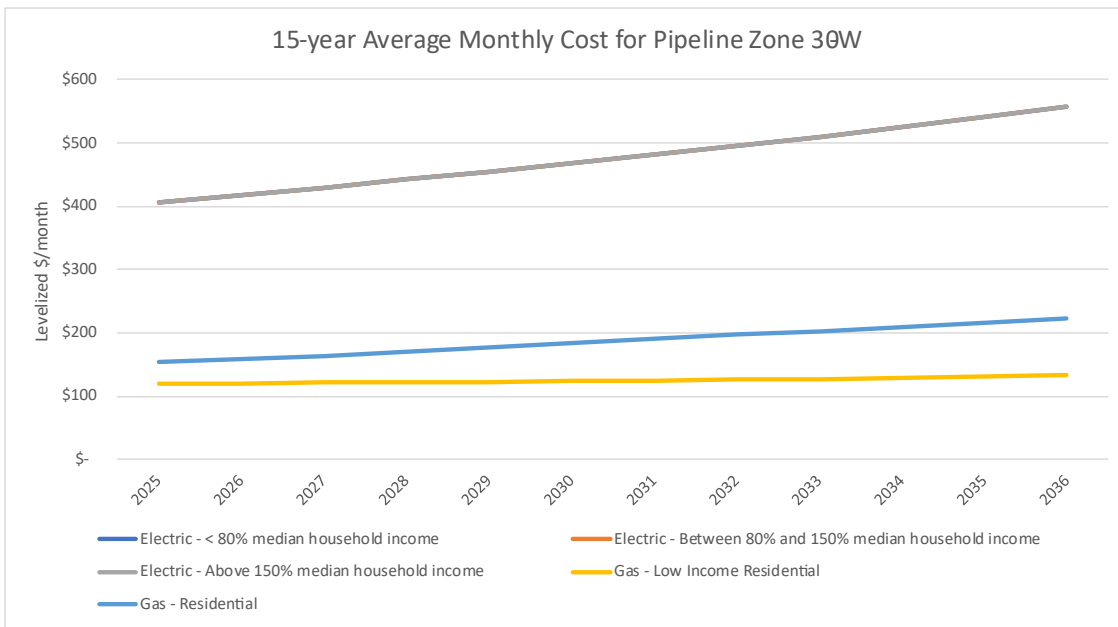
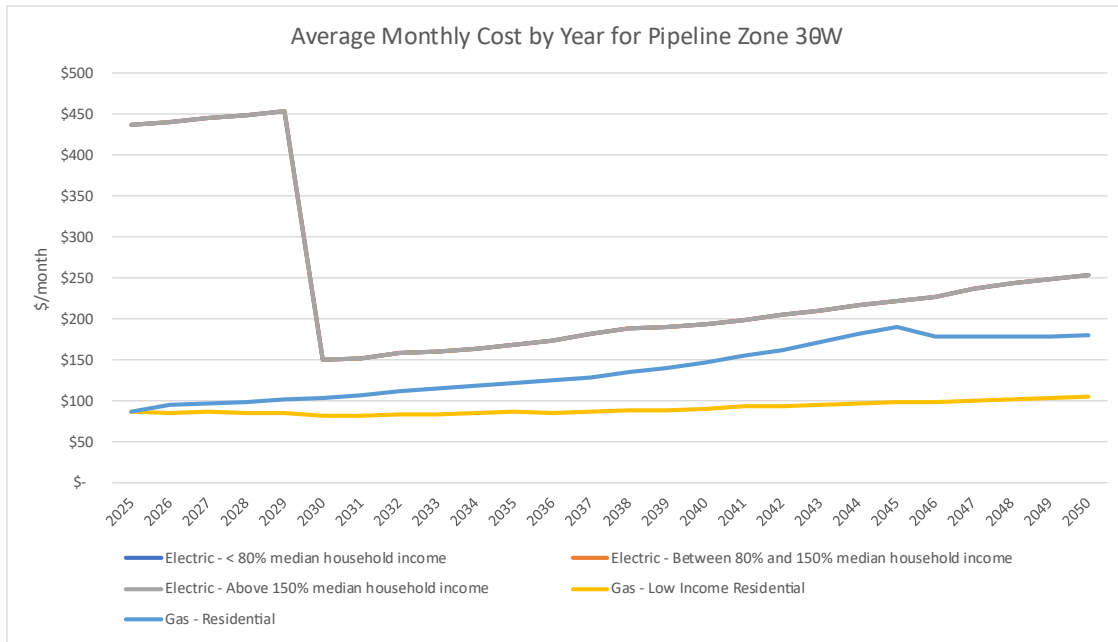


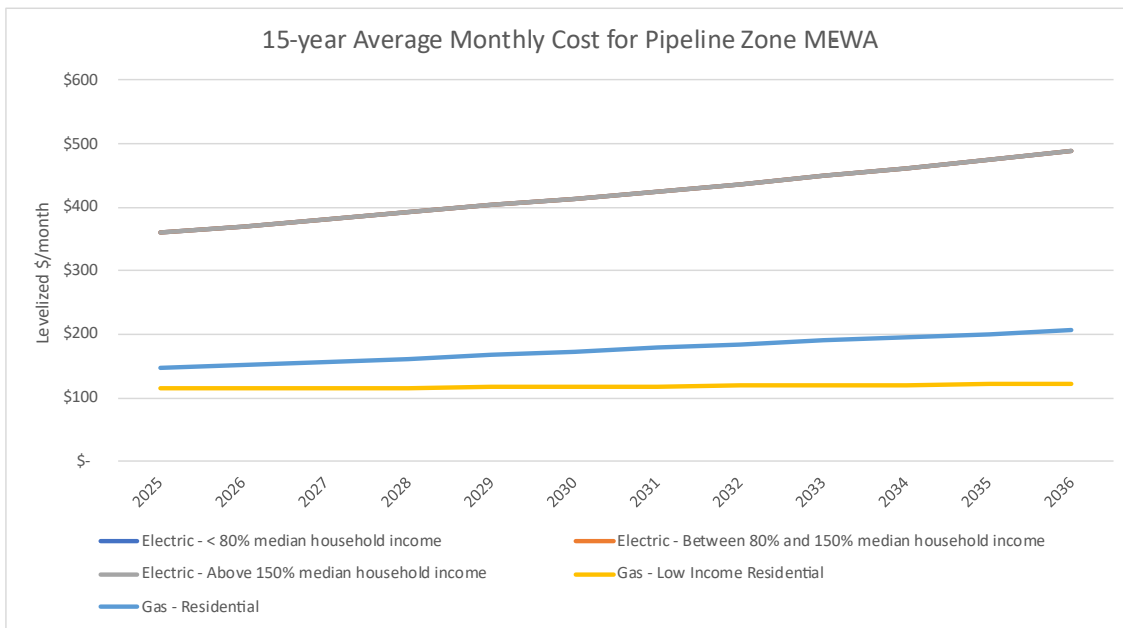
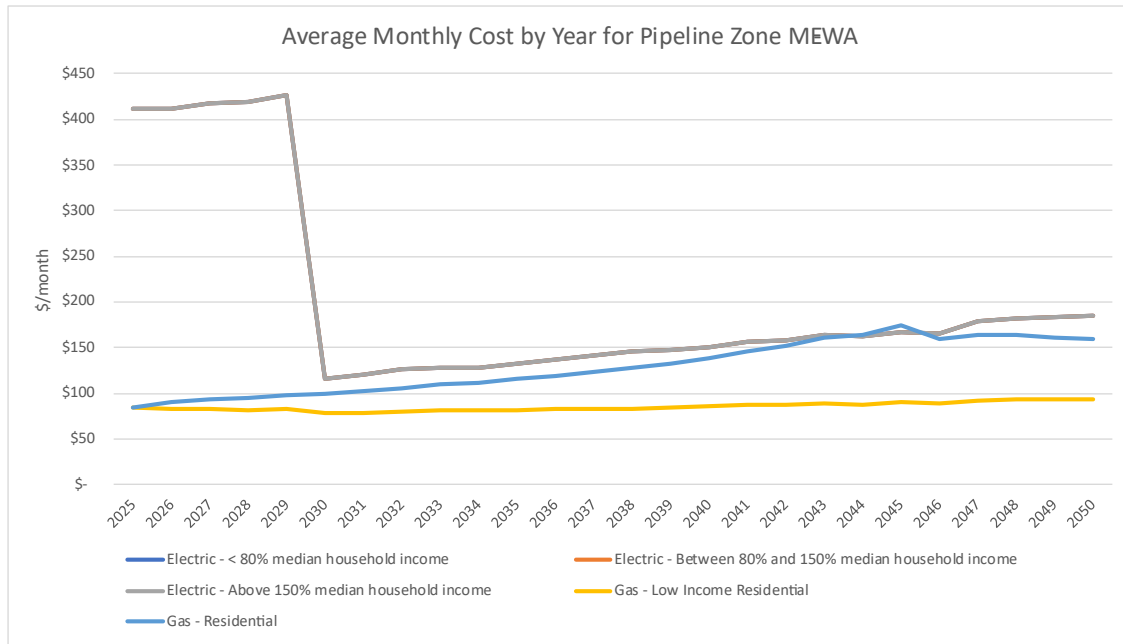
Zone 11

Zone 20

Zone 26

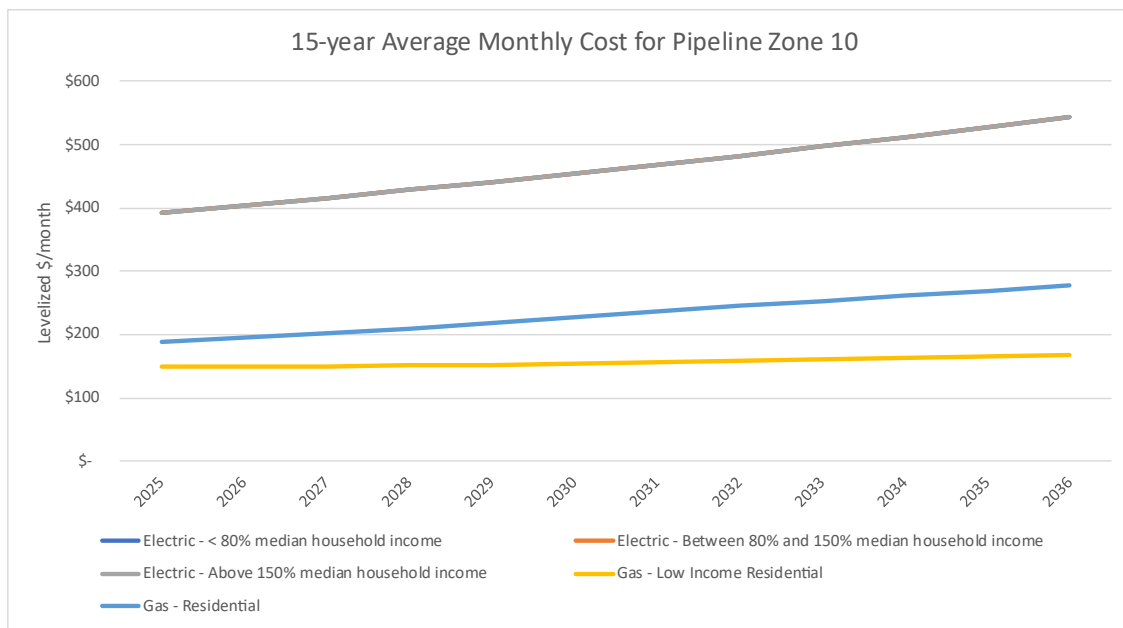
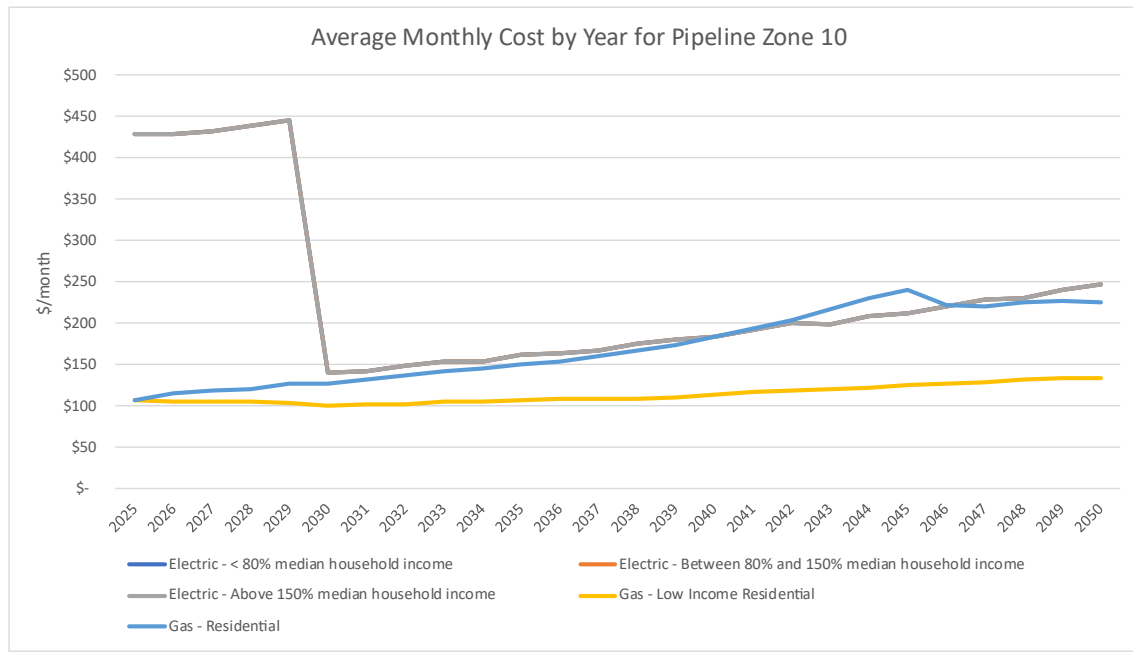
Zone 30-S

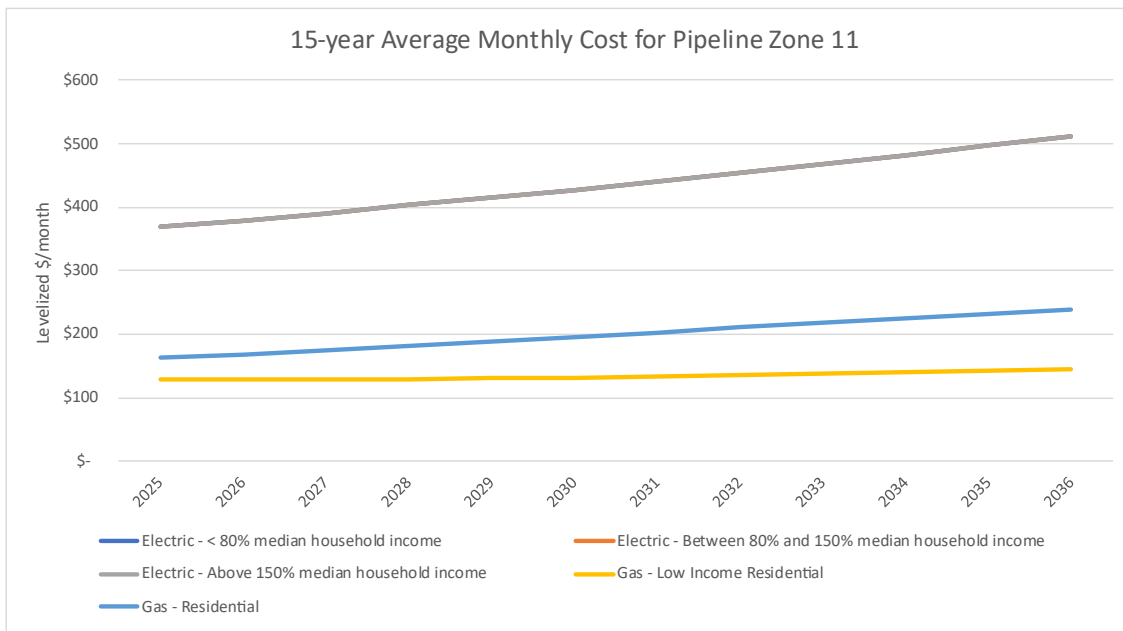
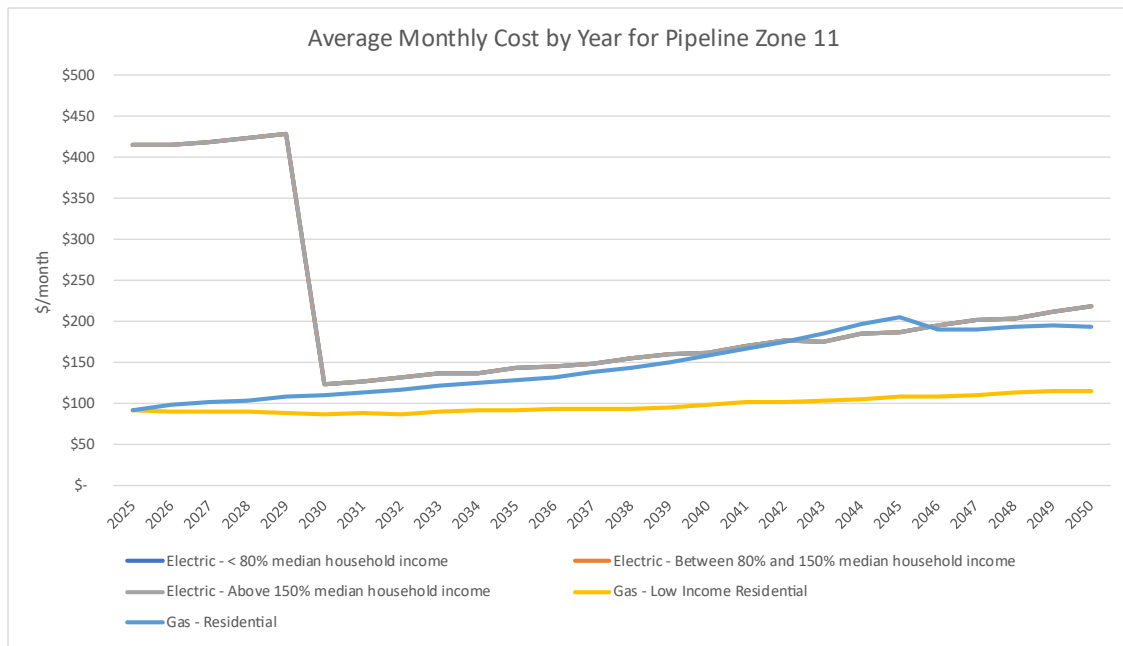
Zone 30-W

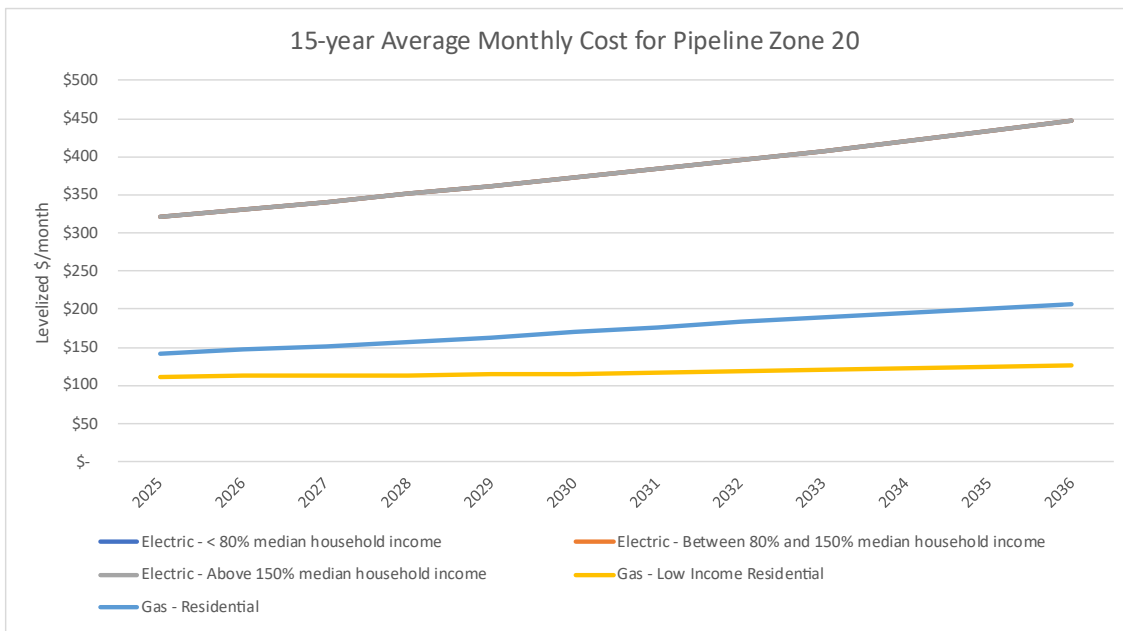
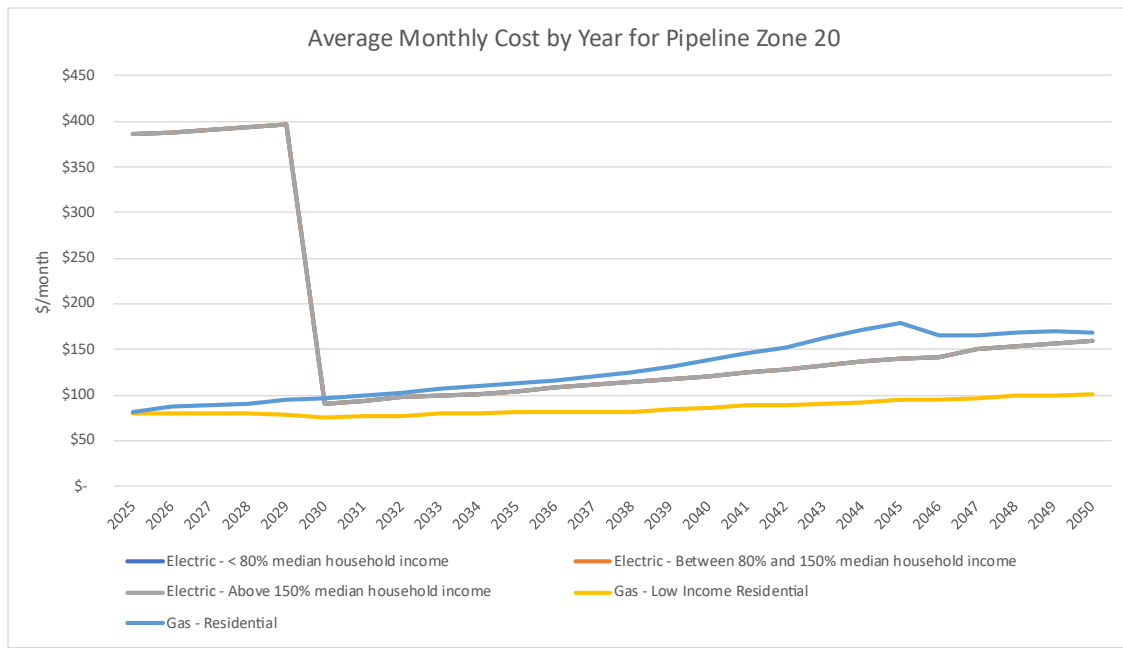
Zone ME-WA

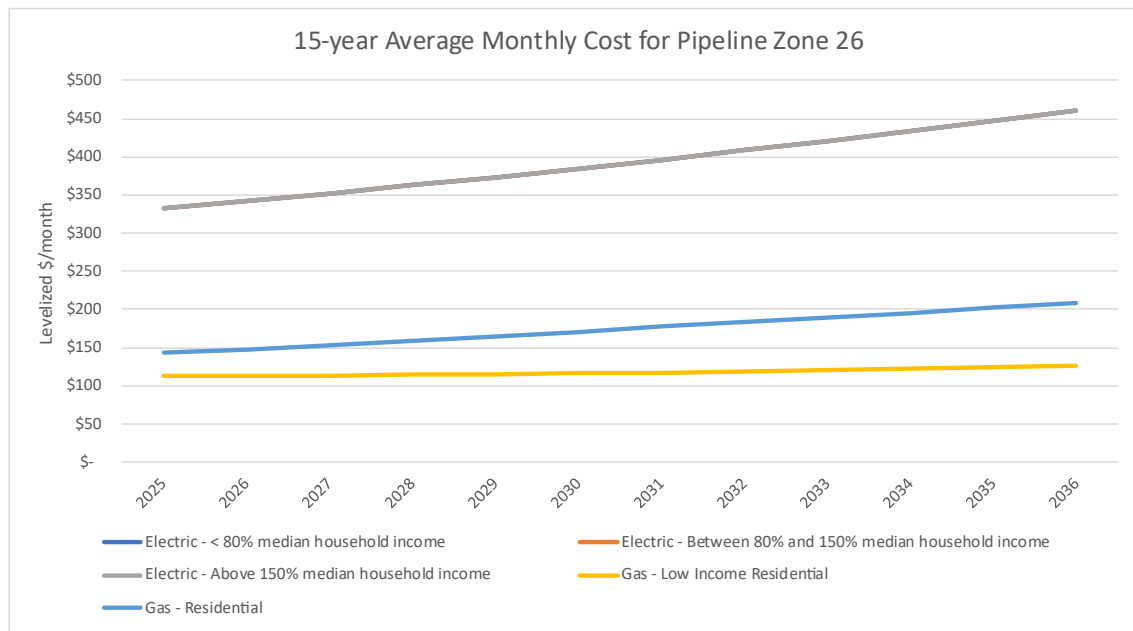
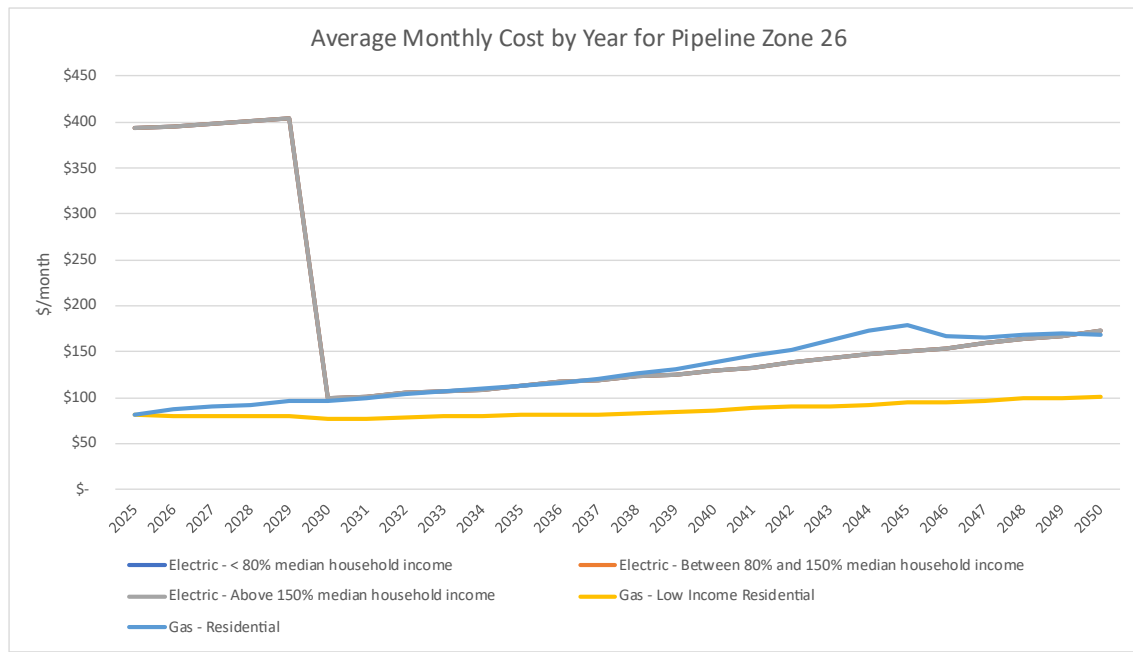
Low Growth Case - Company Perspective (Furnace Cost Reduction Not Included)

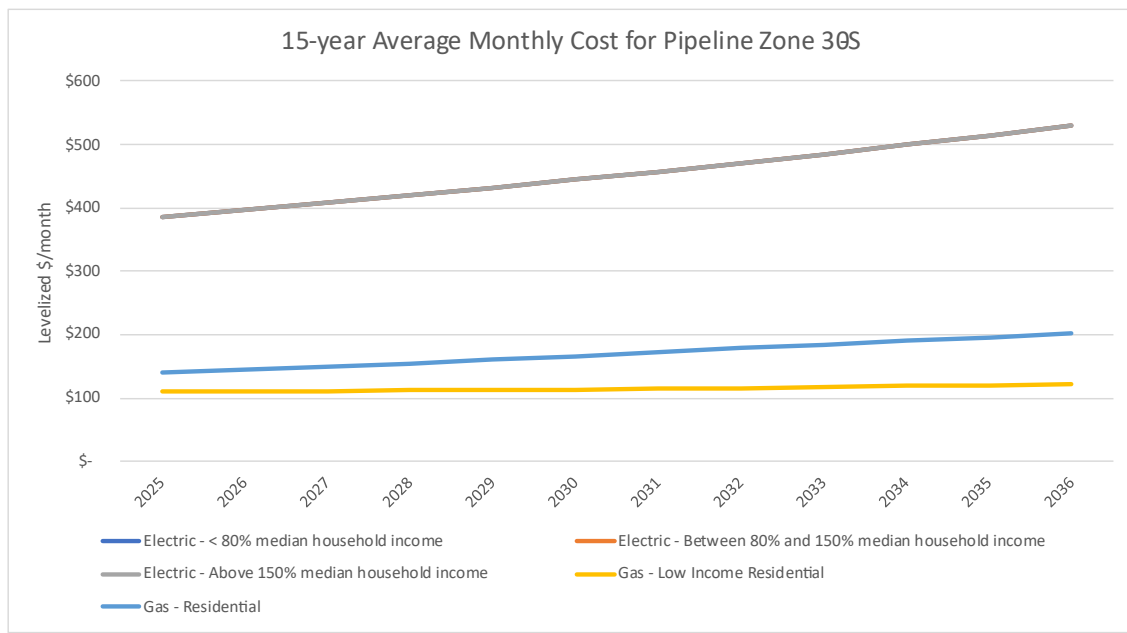
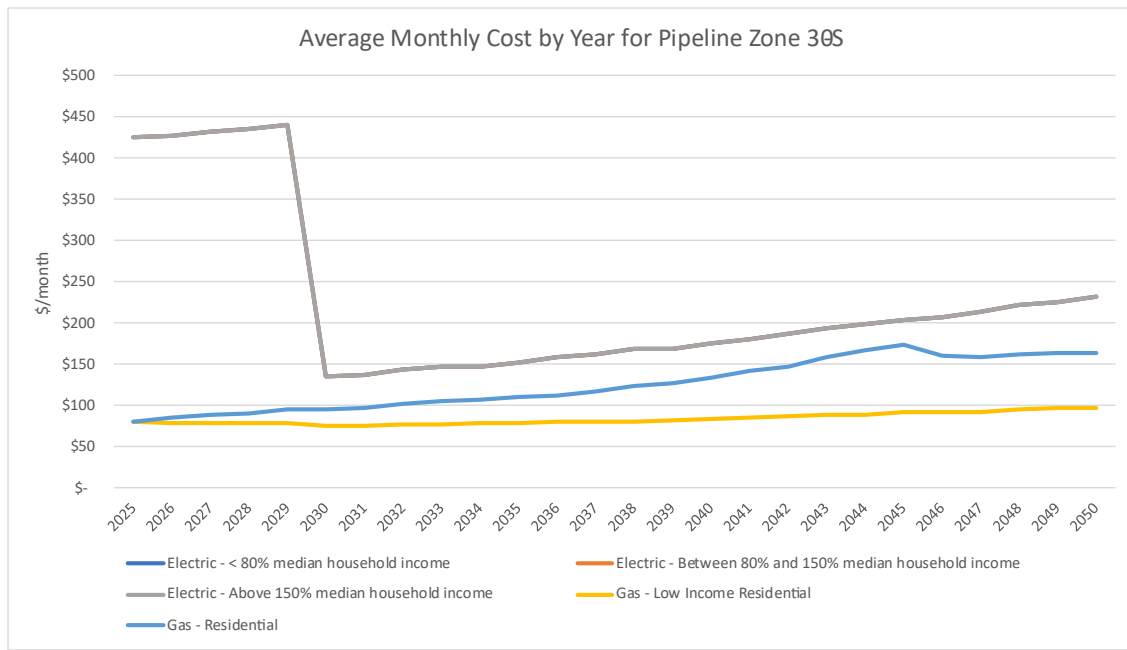
Zone 10

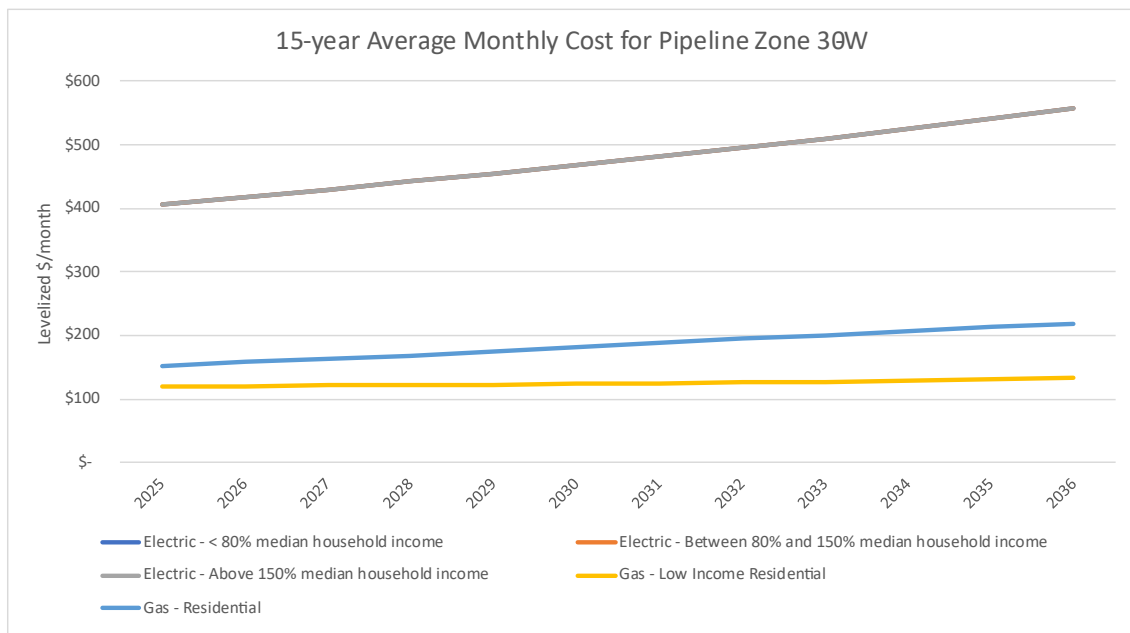
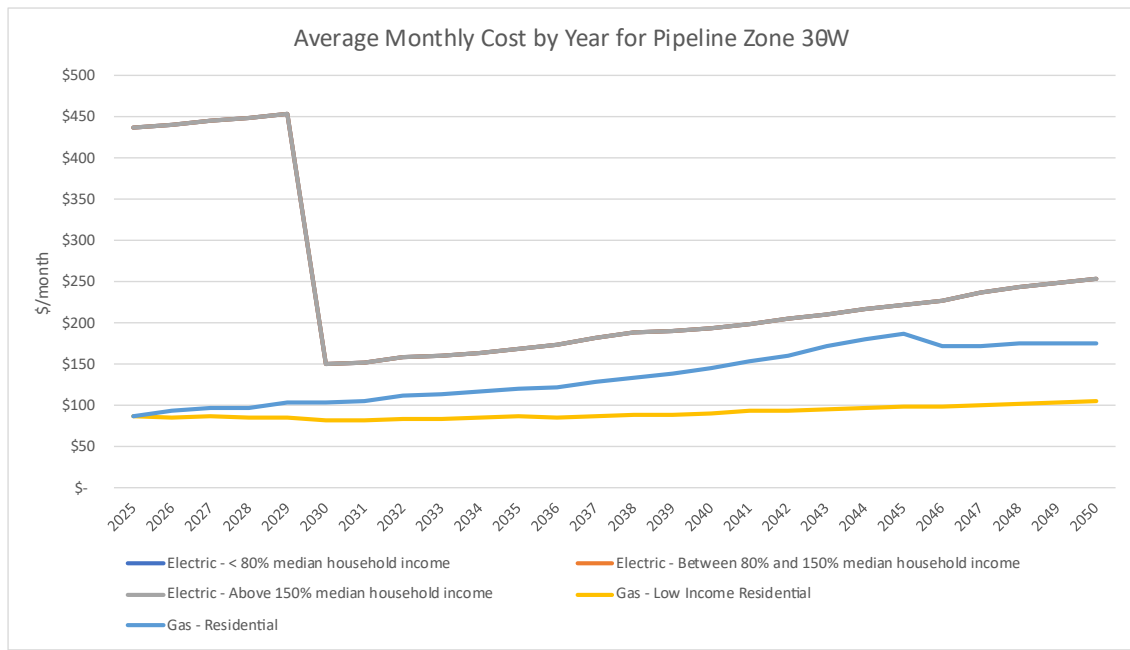


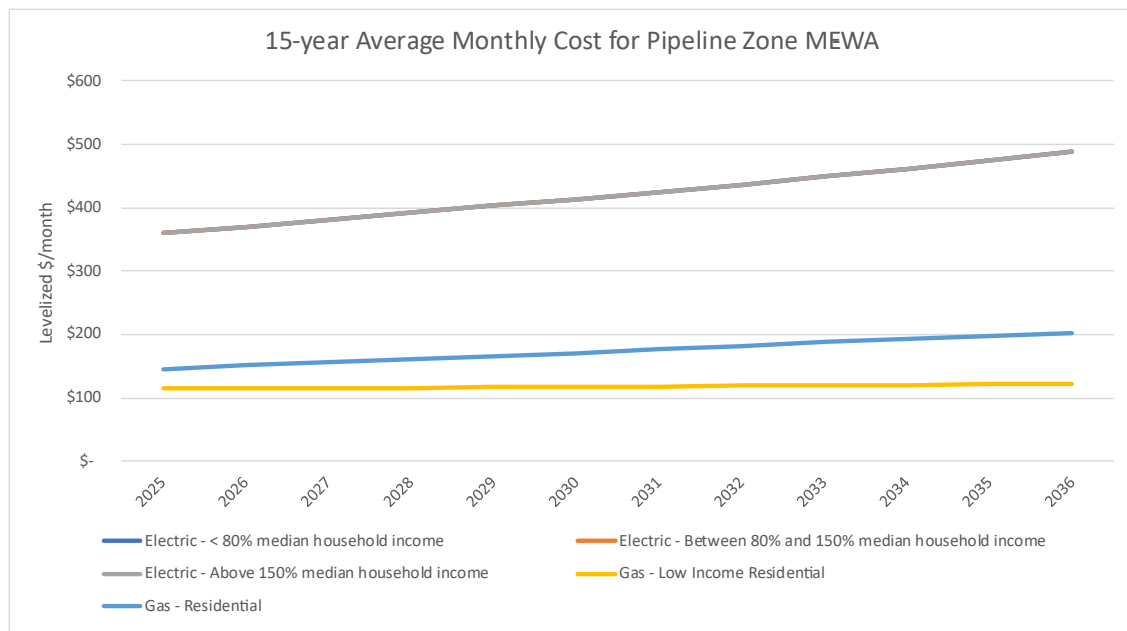
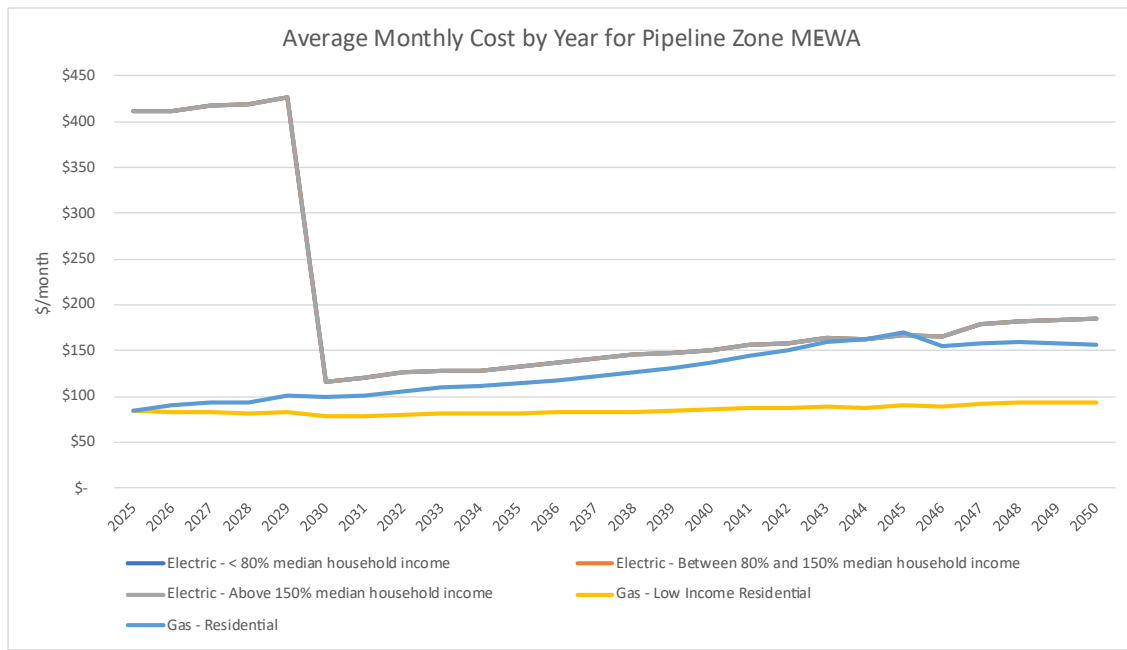
Zone 11

Zone 20

Zone 26

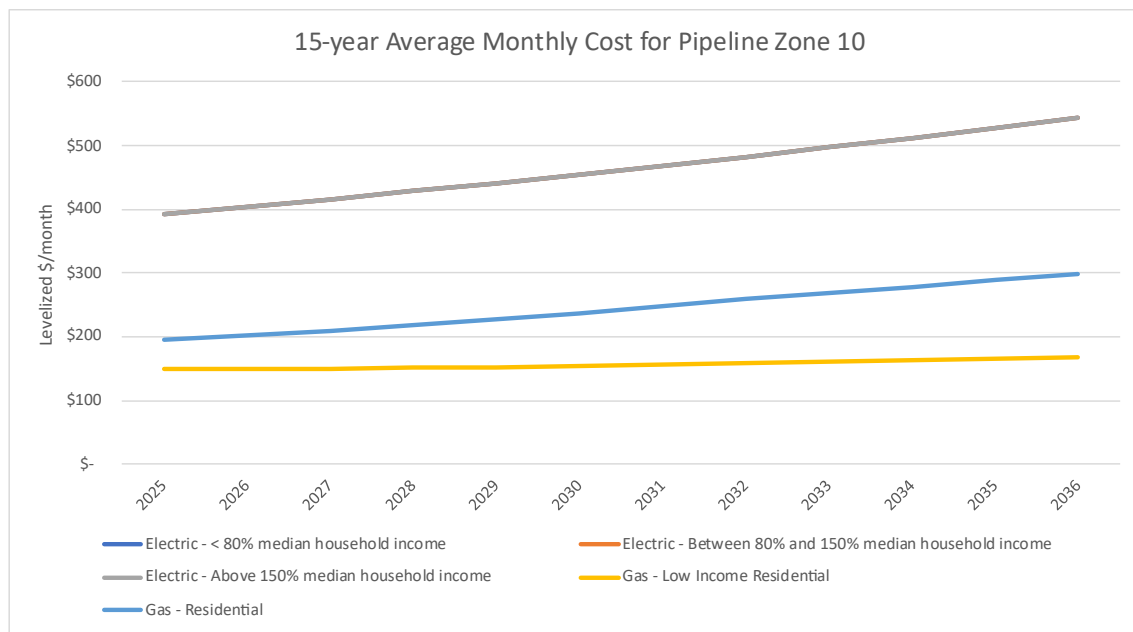
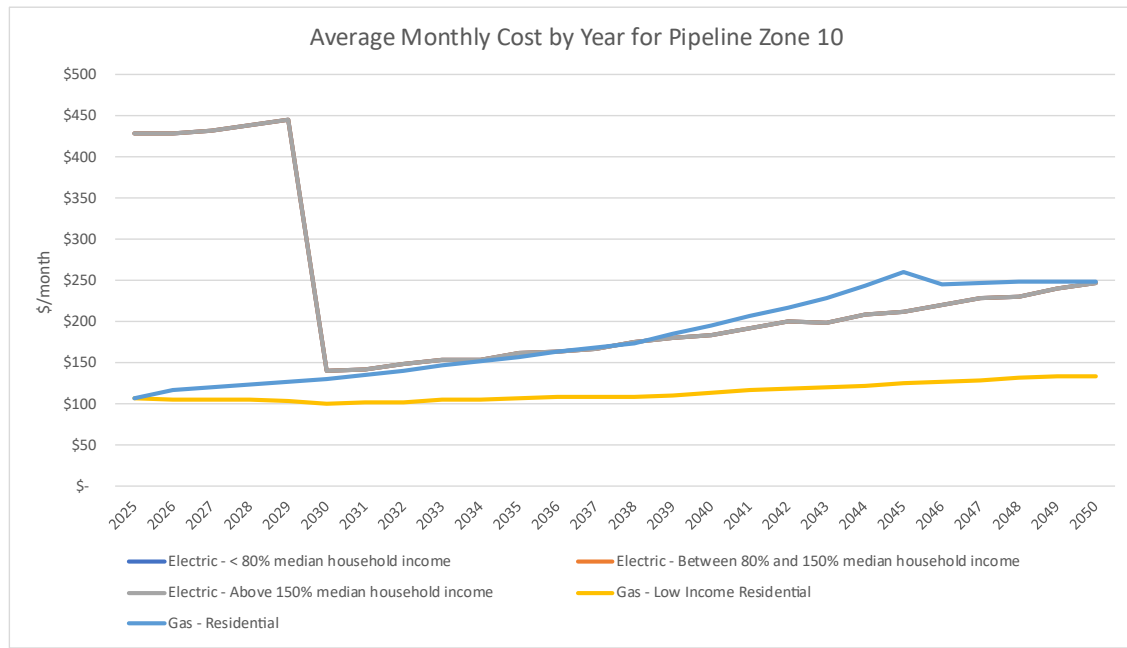
Zone 30-S

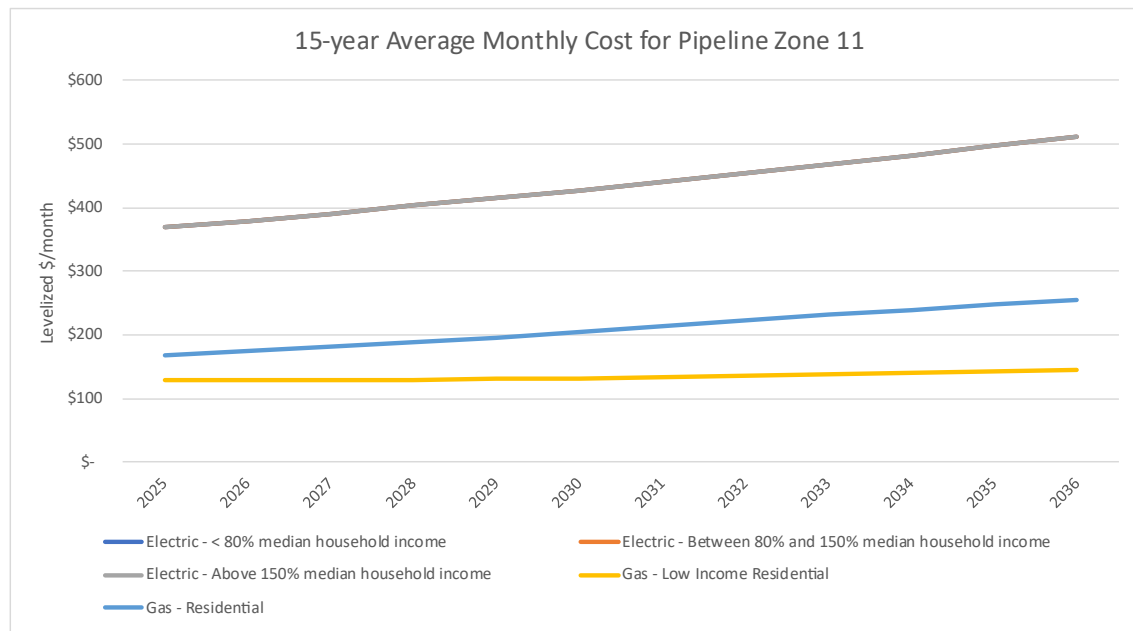
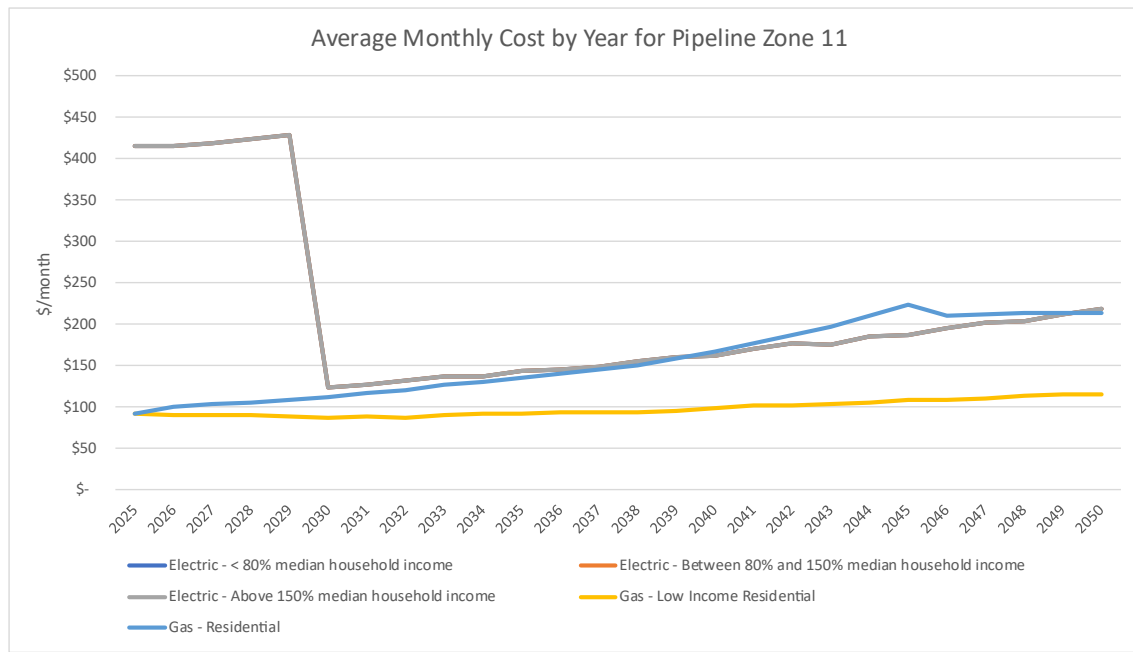
Zone 30-W

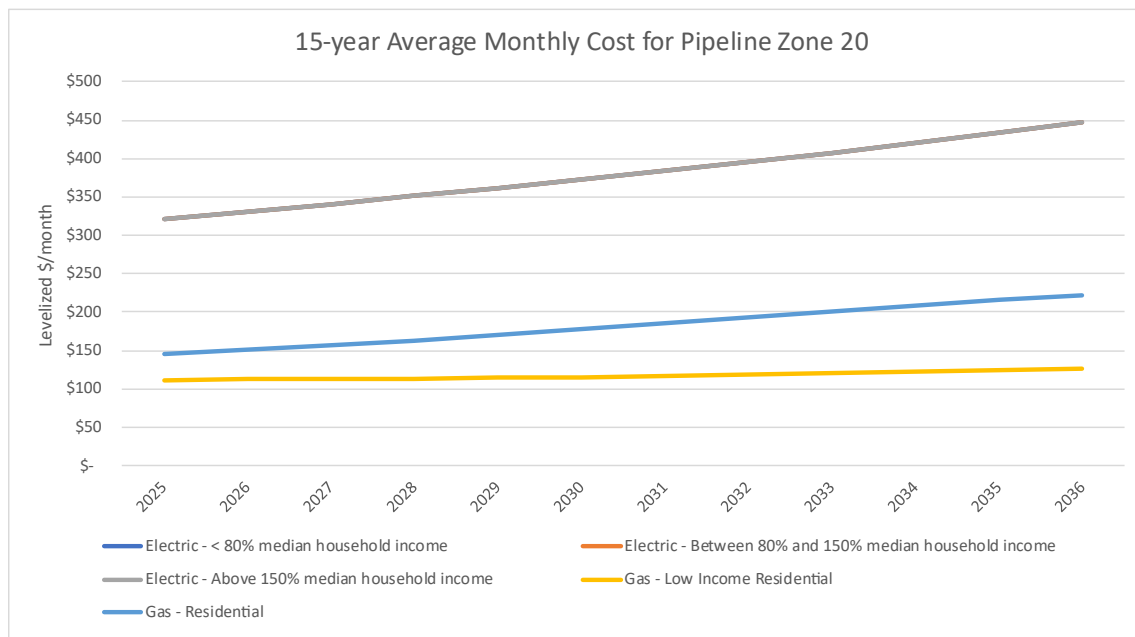
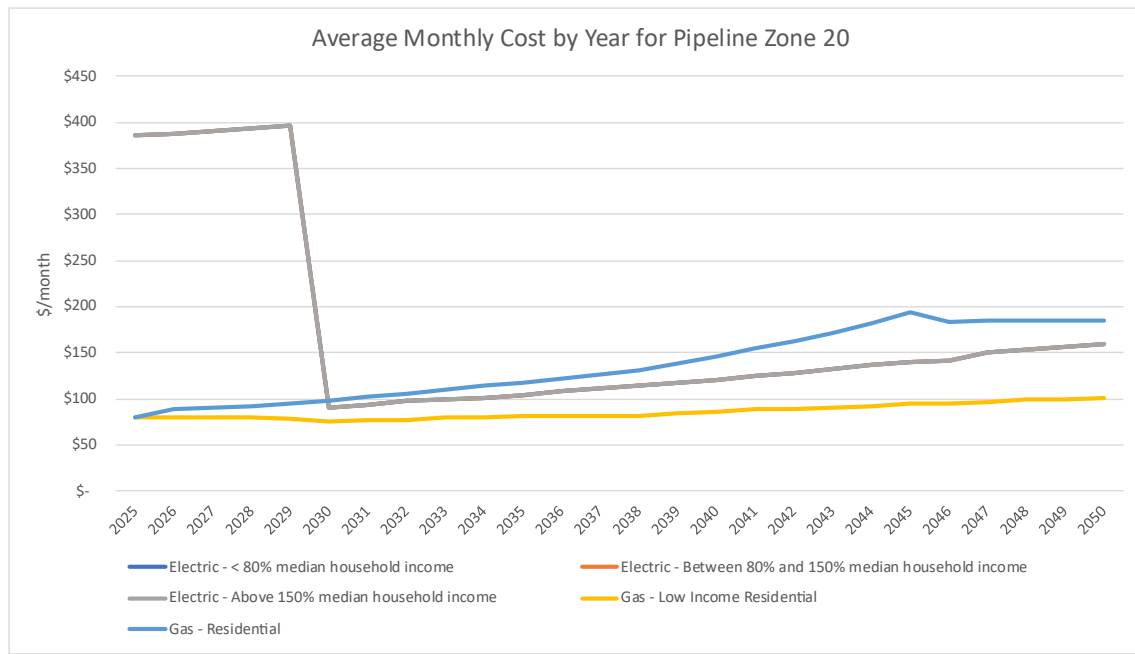
Zone ME-WA

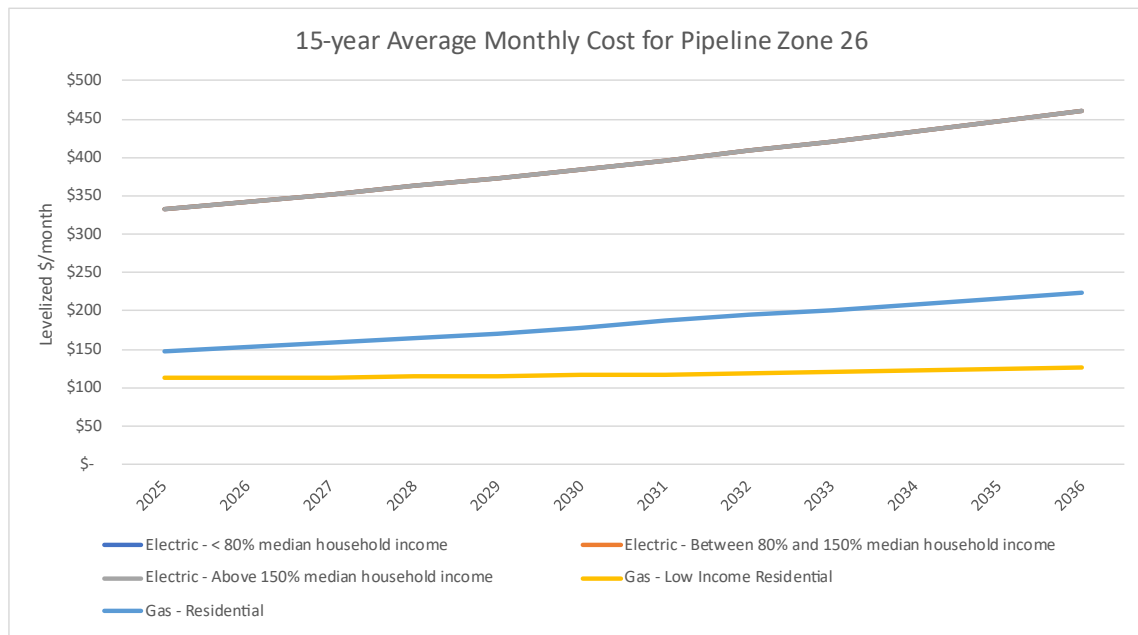
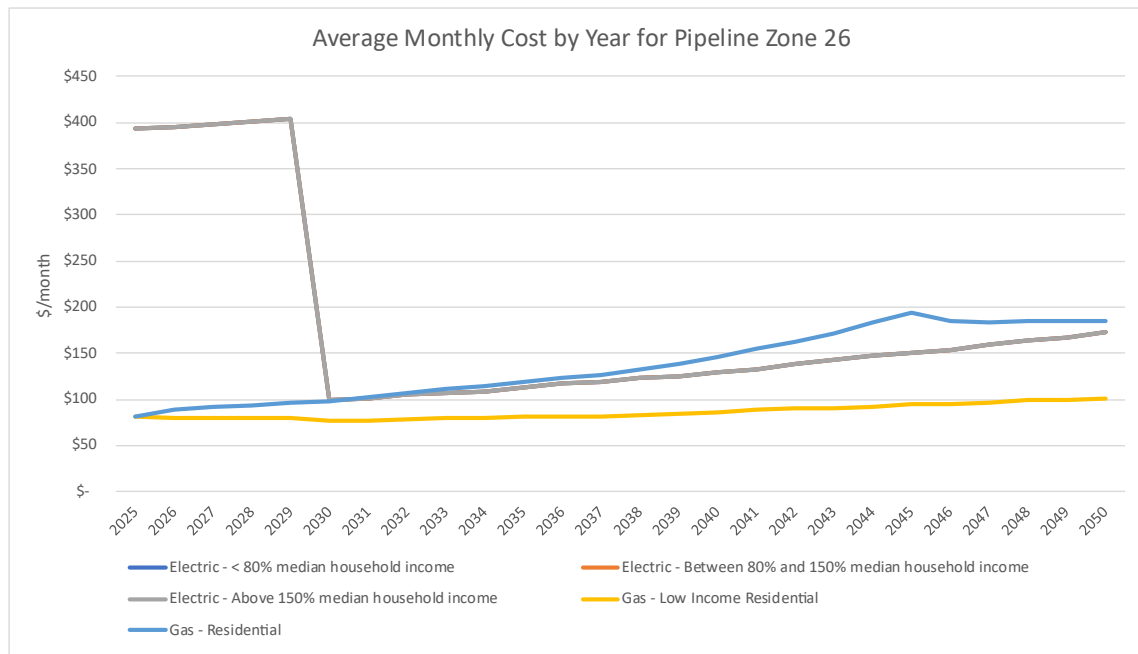
High Growth Case - Company Perspective (Furnace Cost Reduction Not Included)

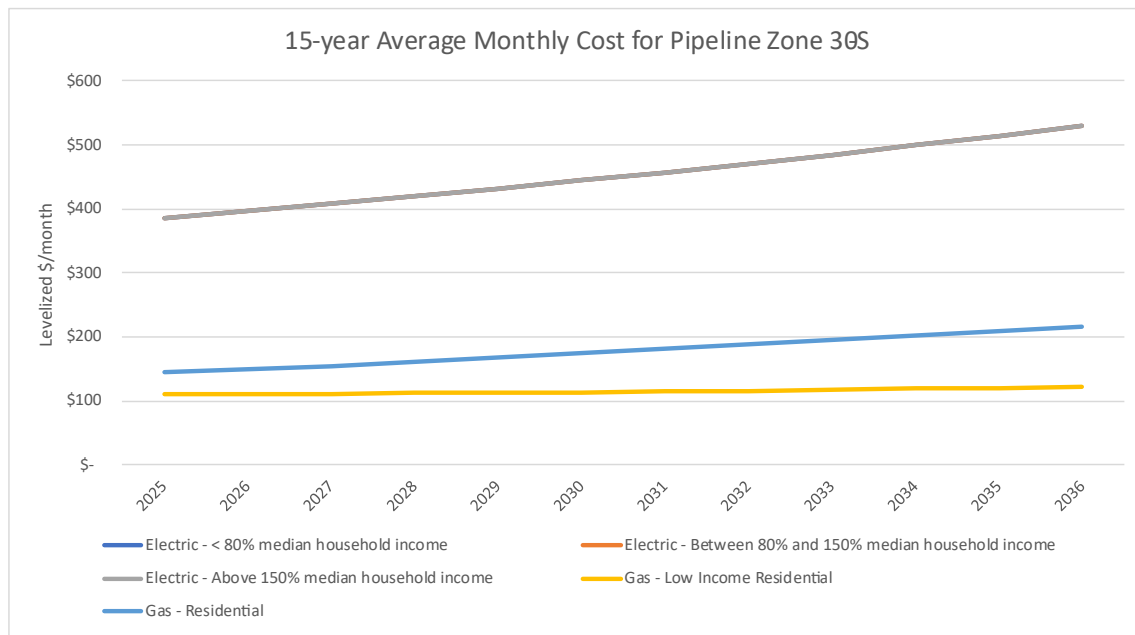
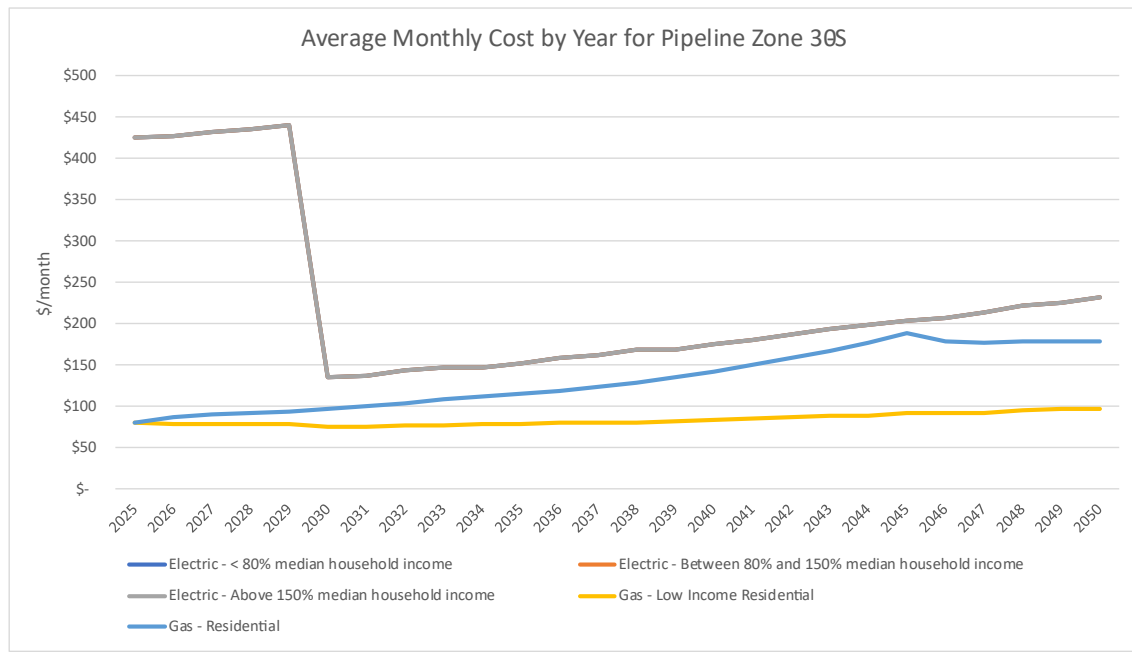
Zone 10

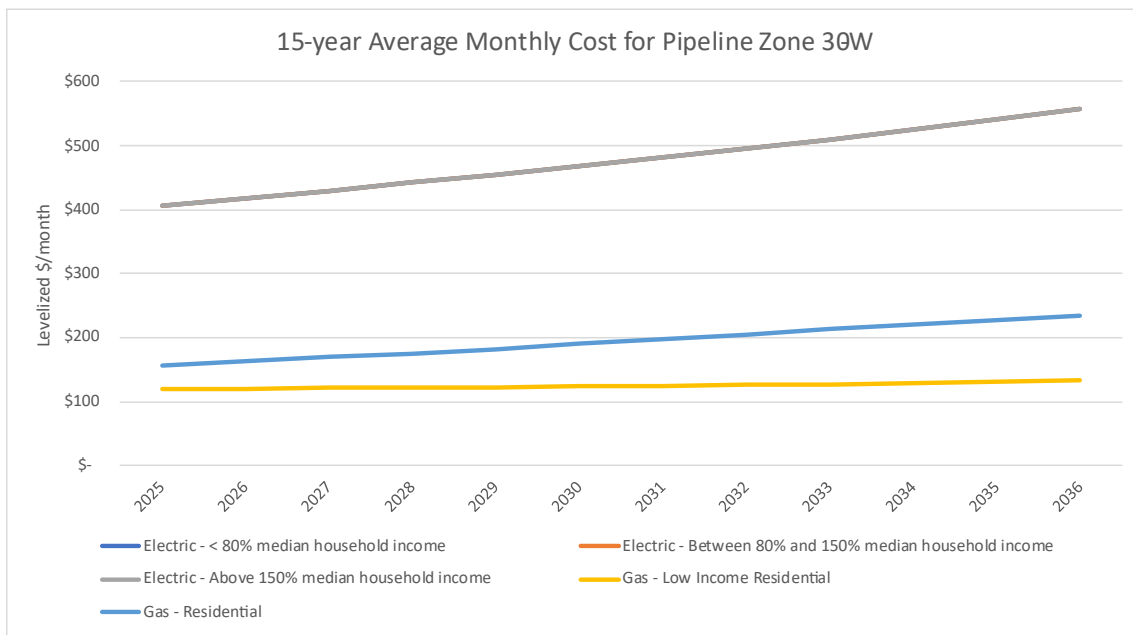
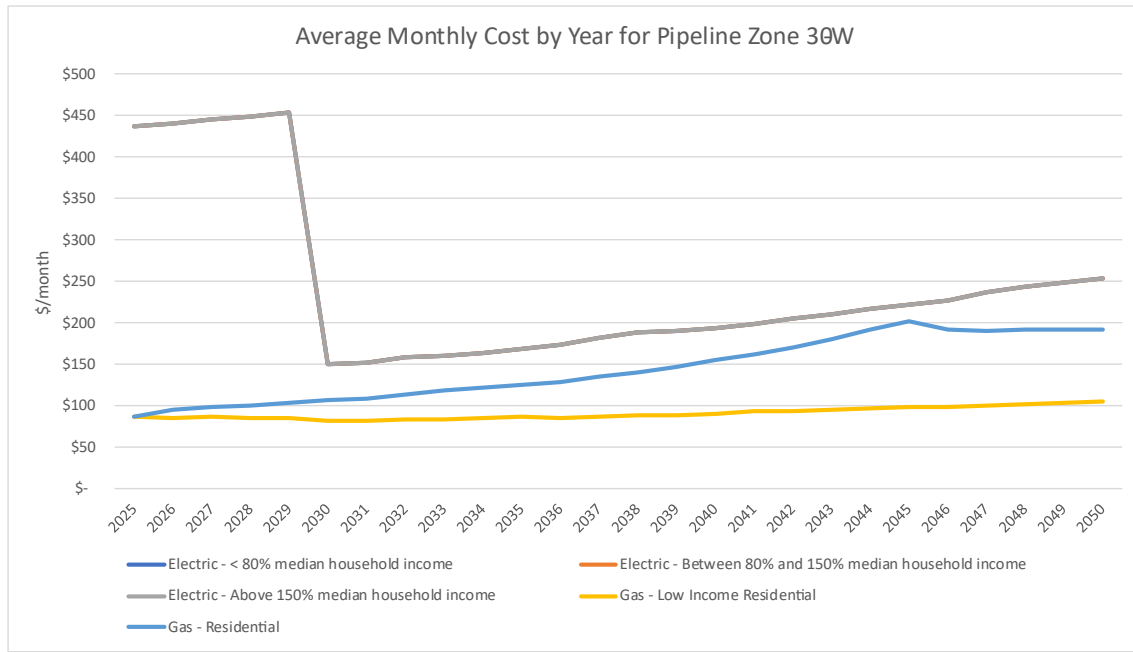


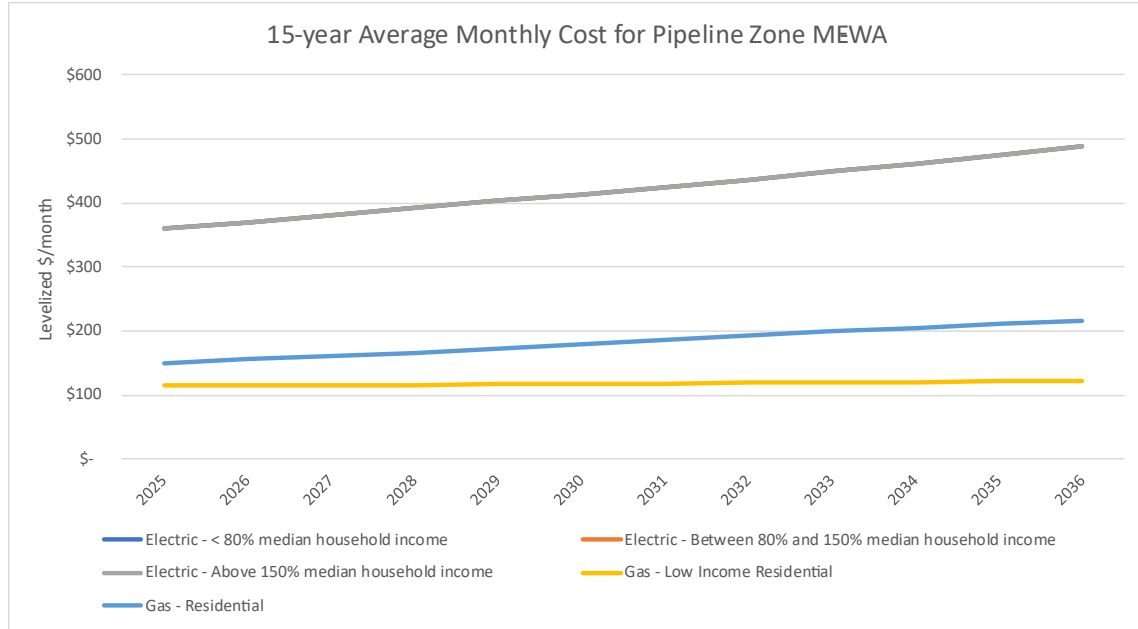
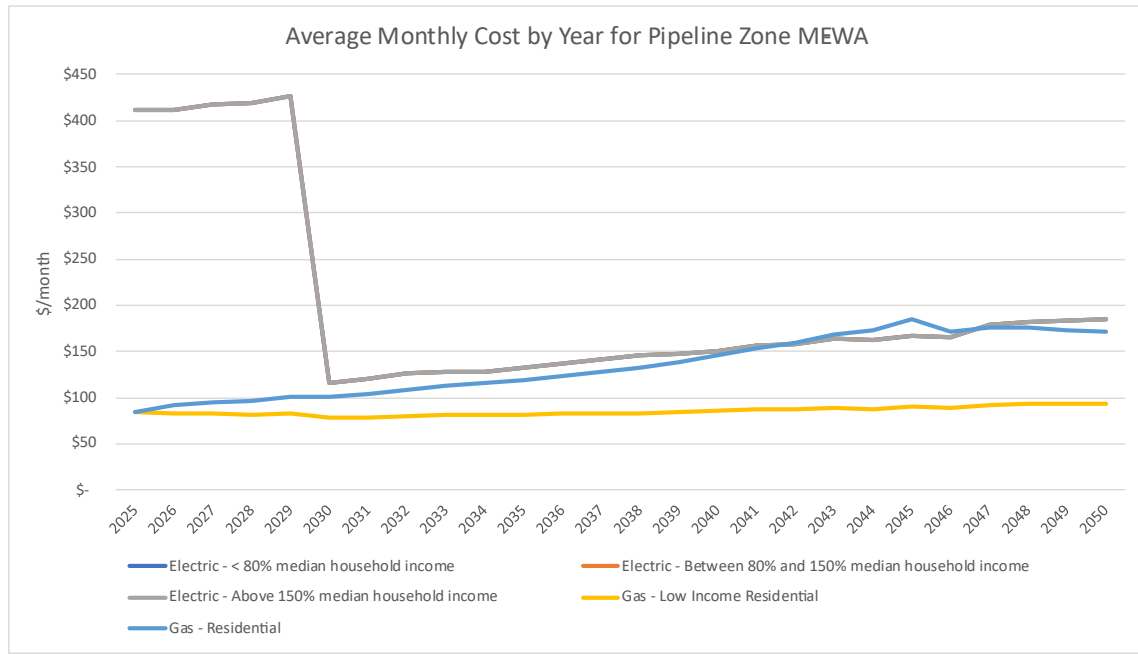
Zone 11

Zone 20

Zone 26

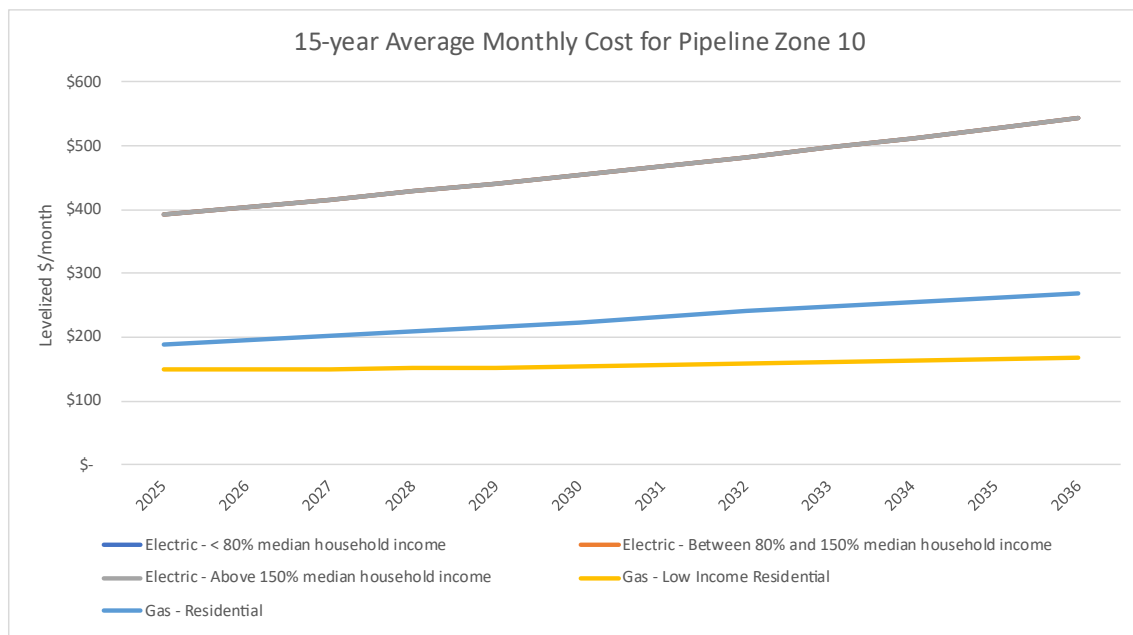
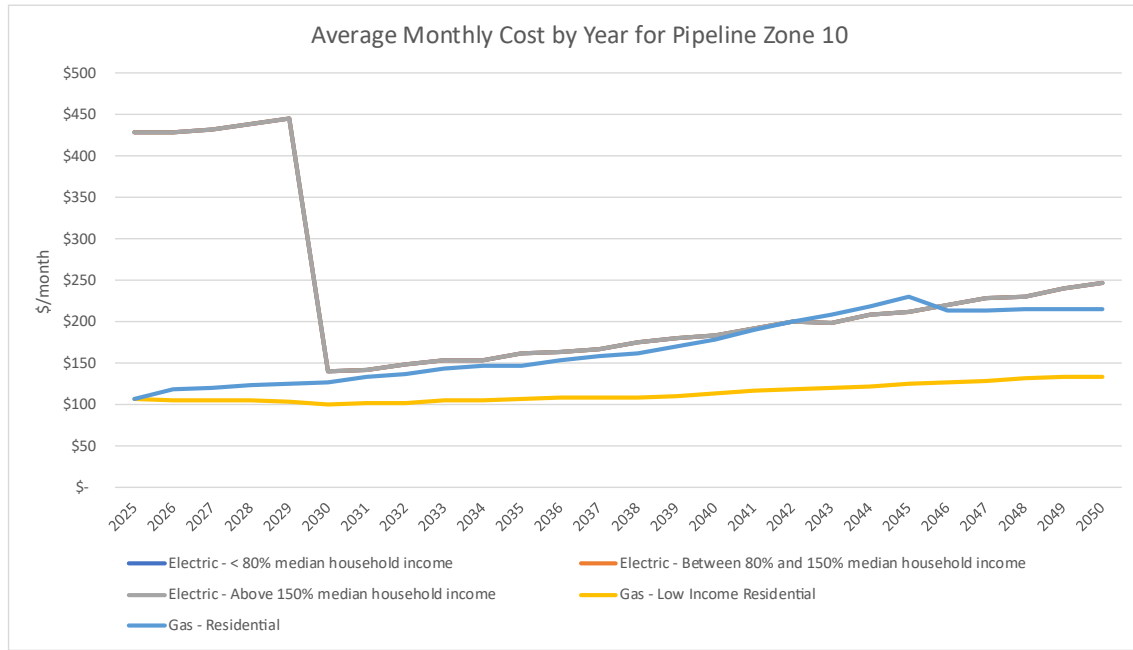
Zone 30-S

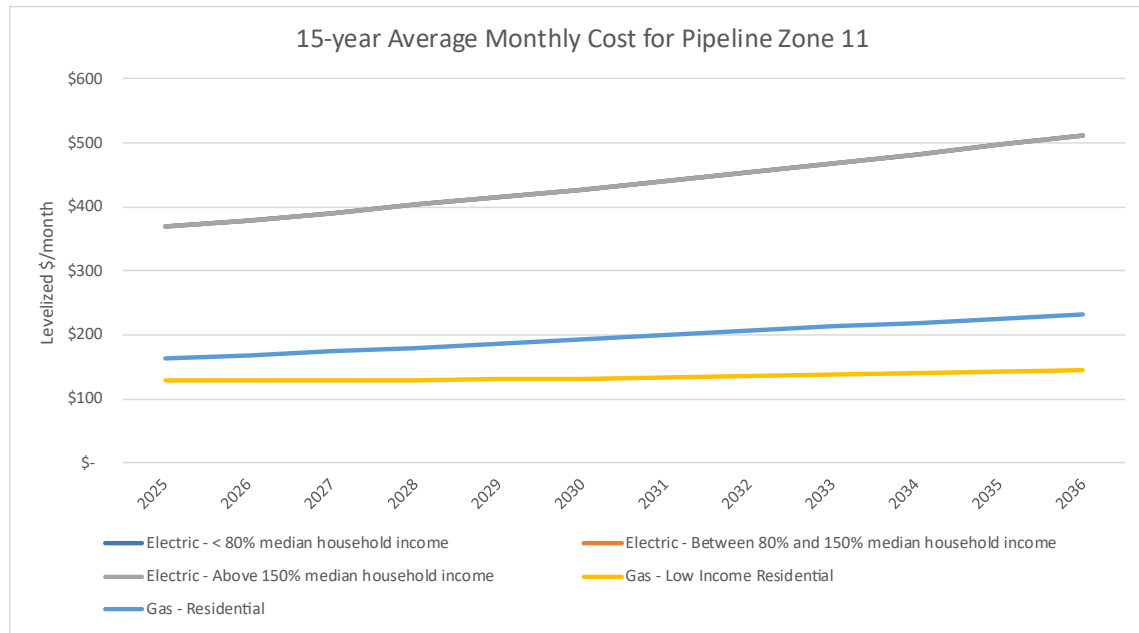
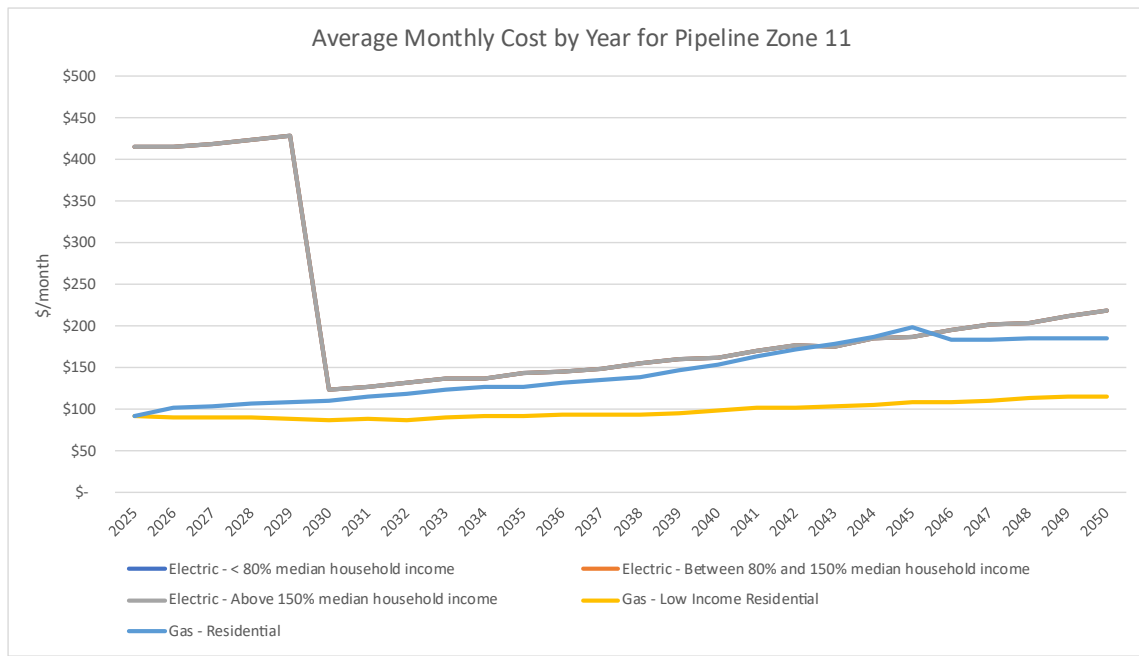
Zone 30-W

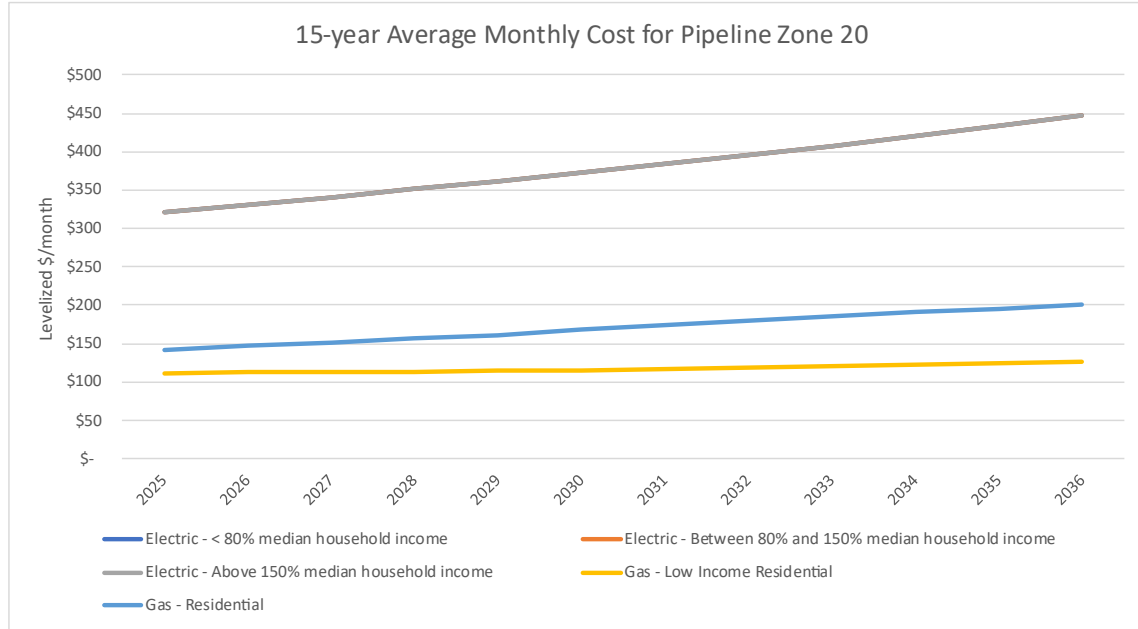
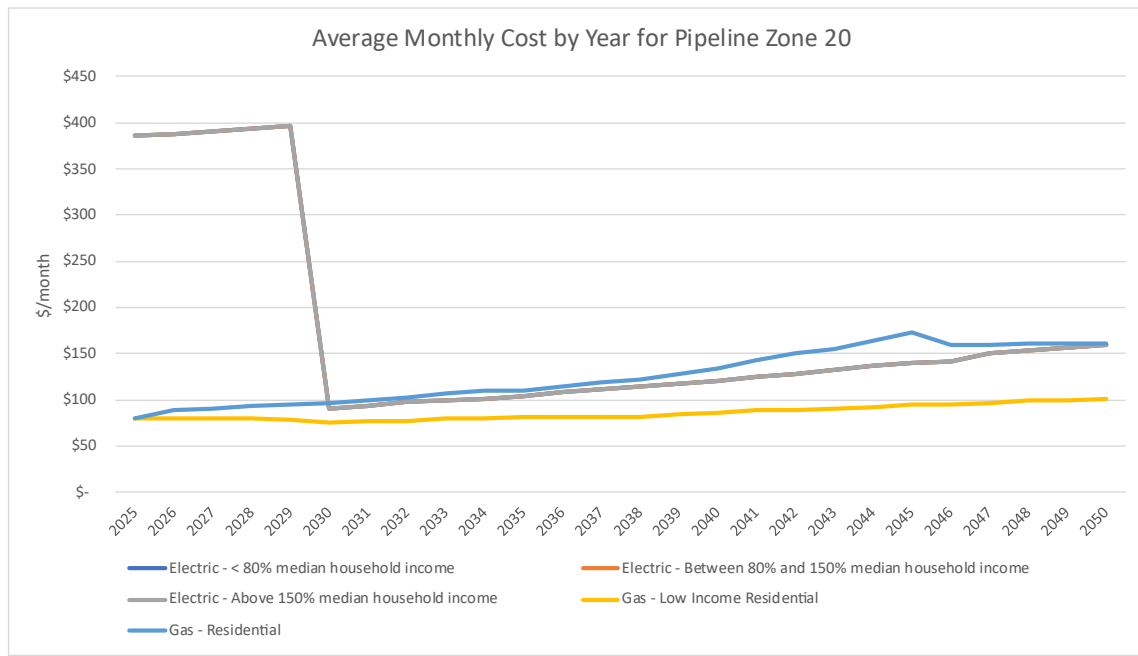
Zone ME-WA

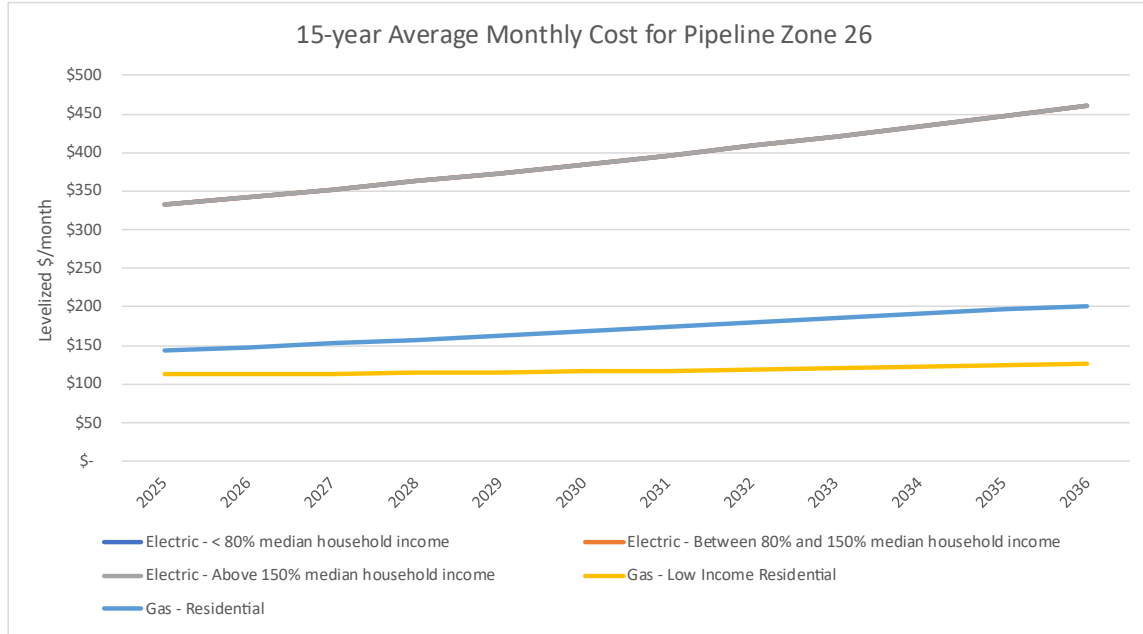
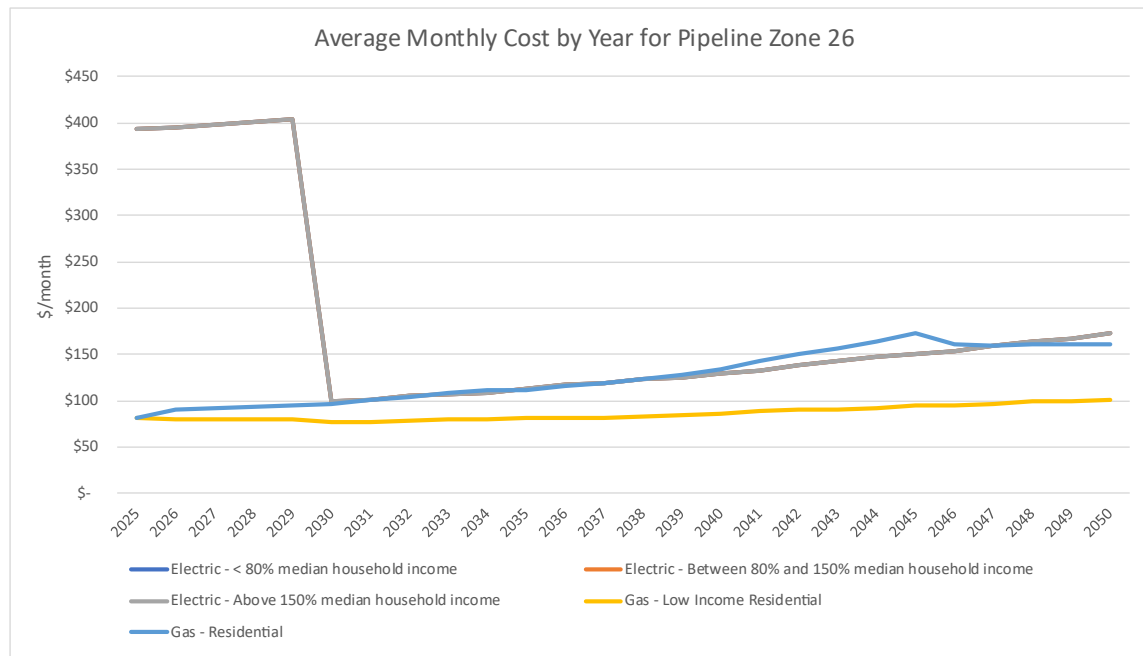
Monte Carlo Simulations - Company Perspective (Furnace Cost Reduction Not Included)

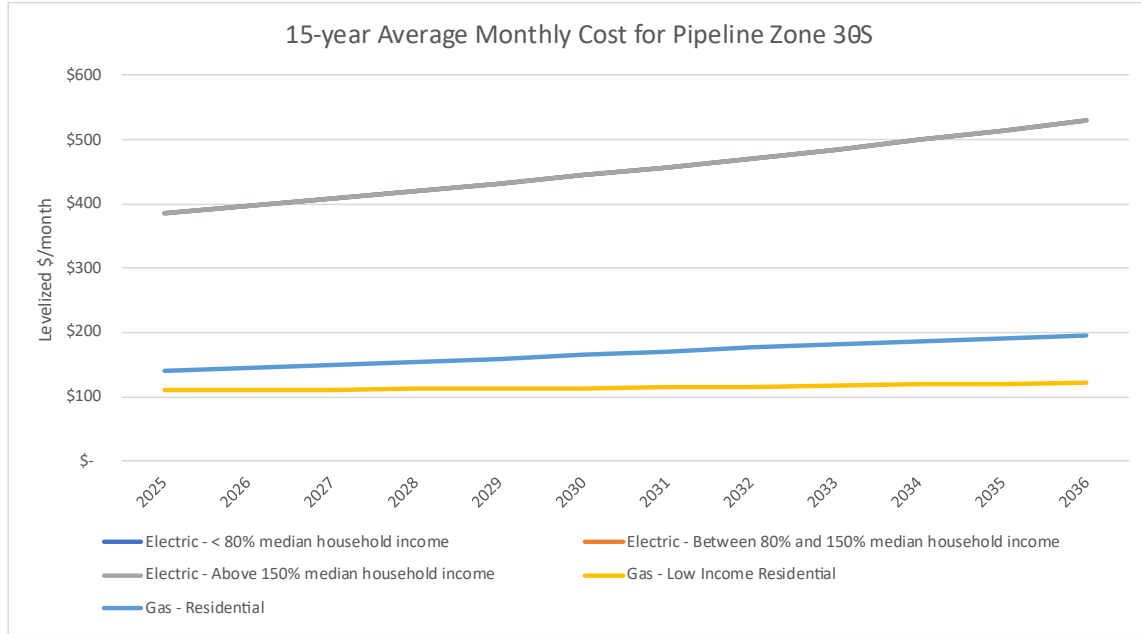
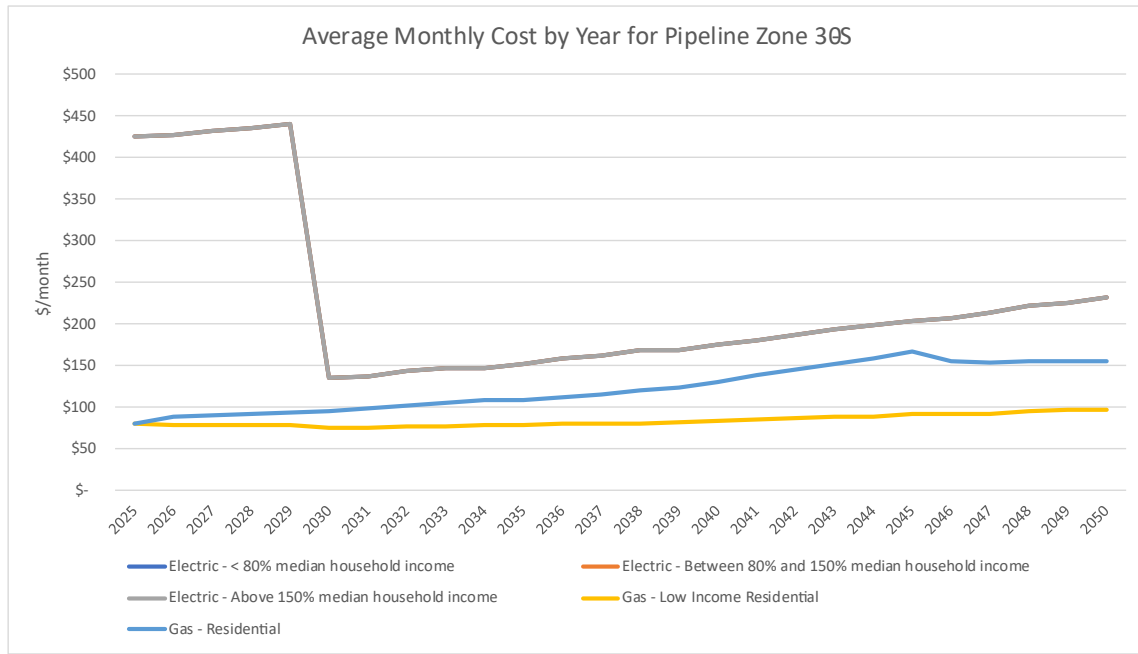
Zone 10

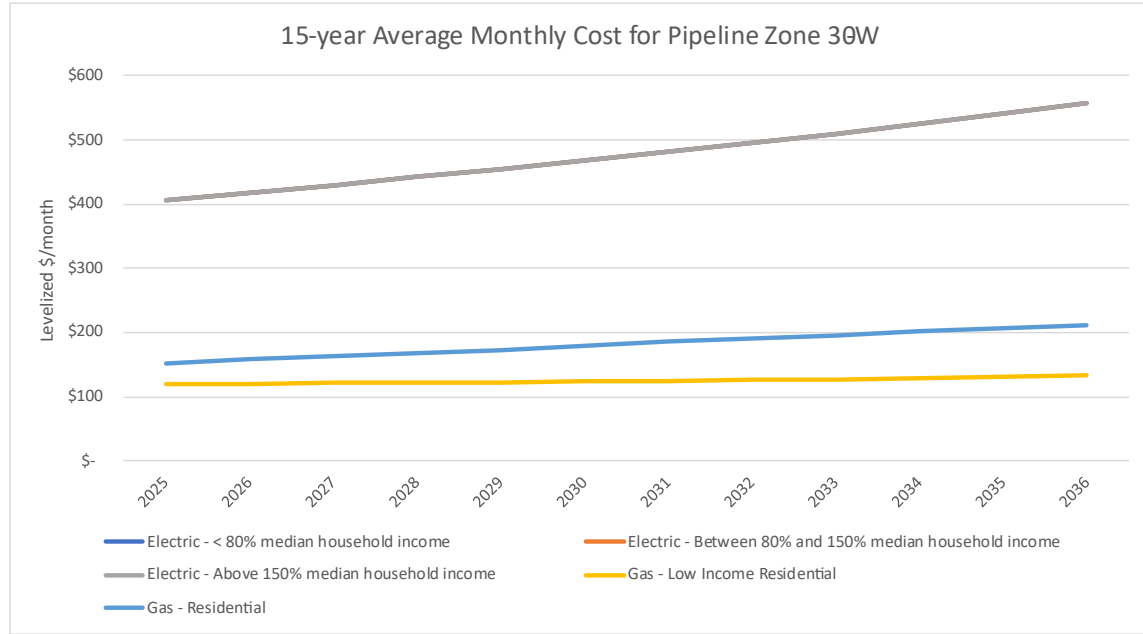
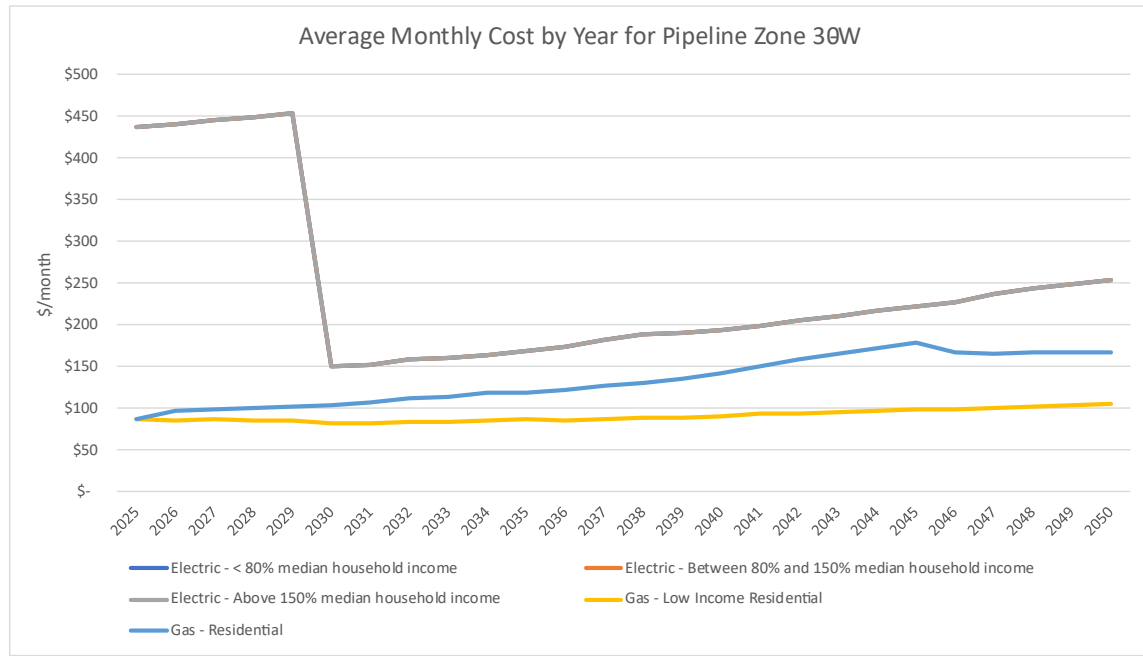


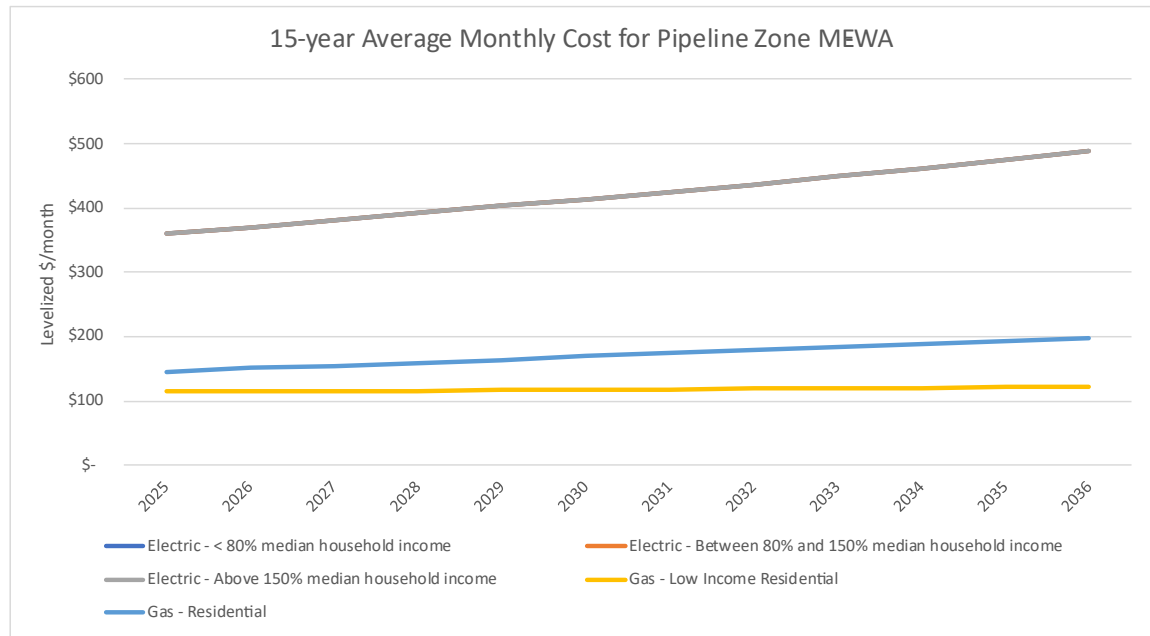
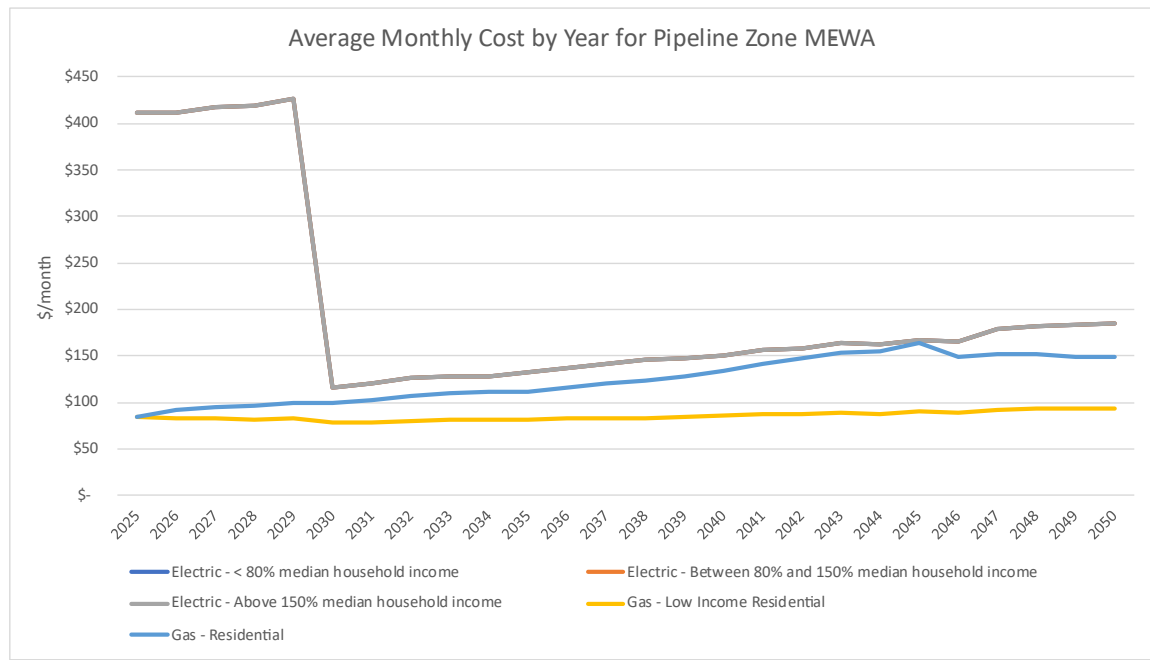
Zone 11

Zone 20

Zone 26

Zone 30-S

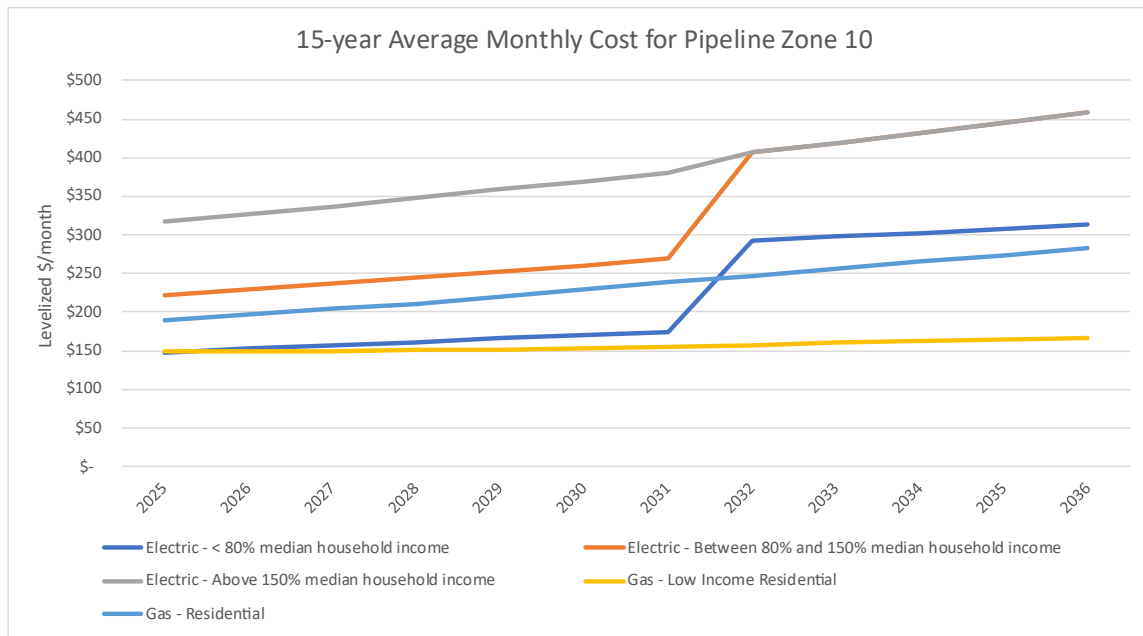
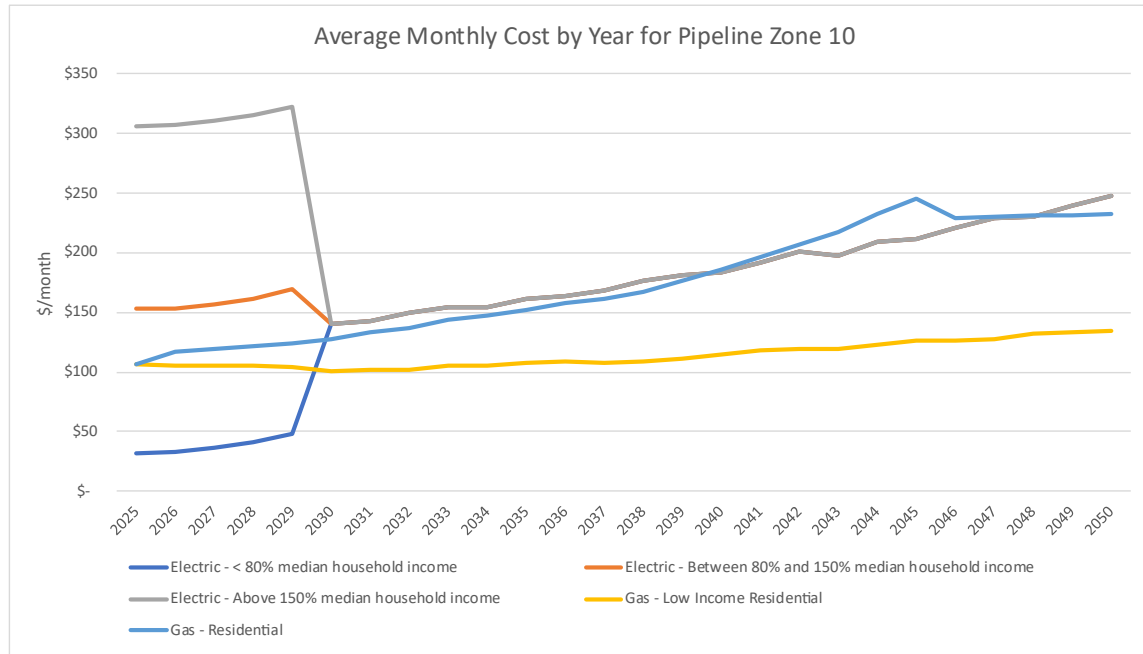
Zone 30-W

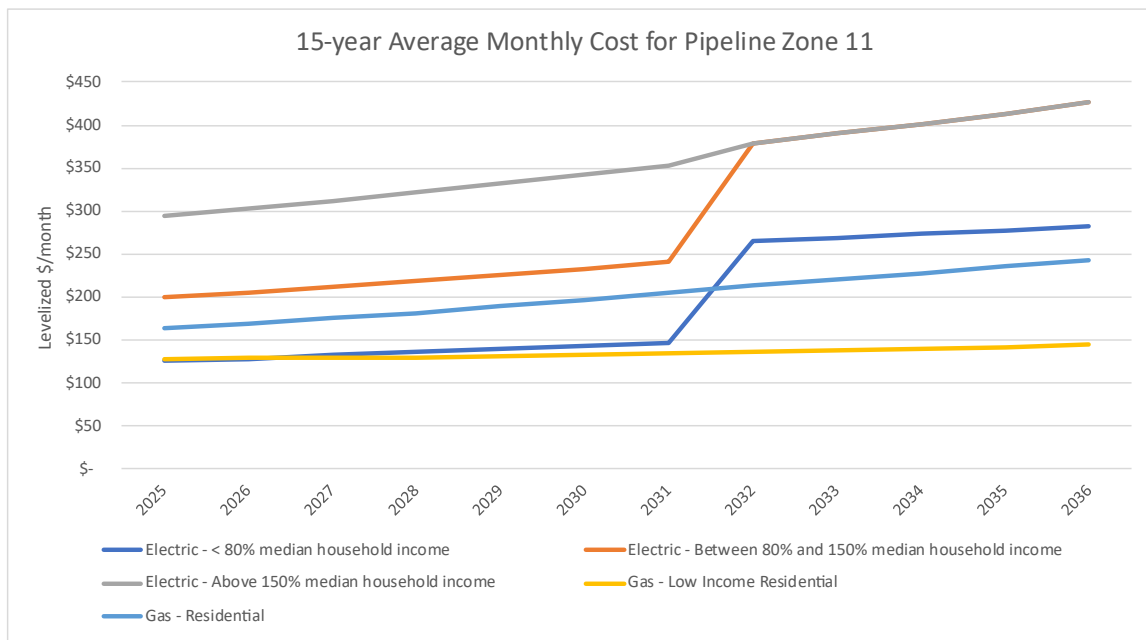
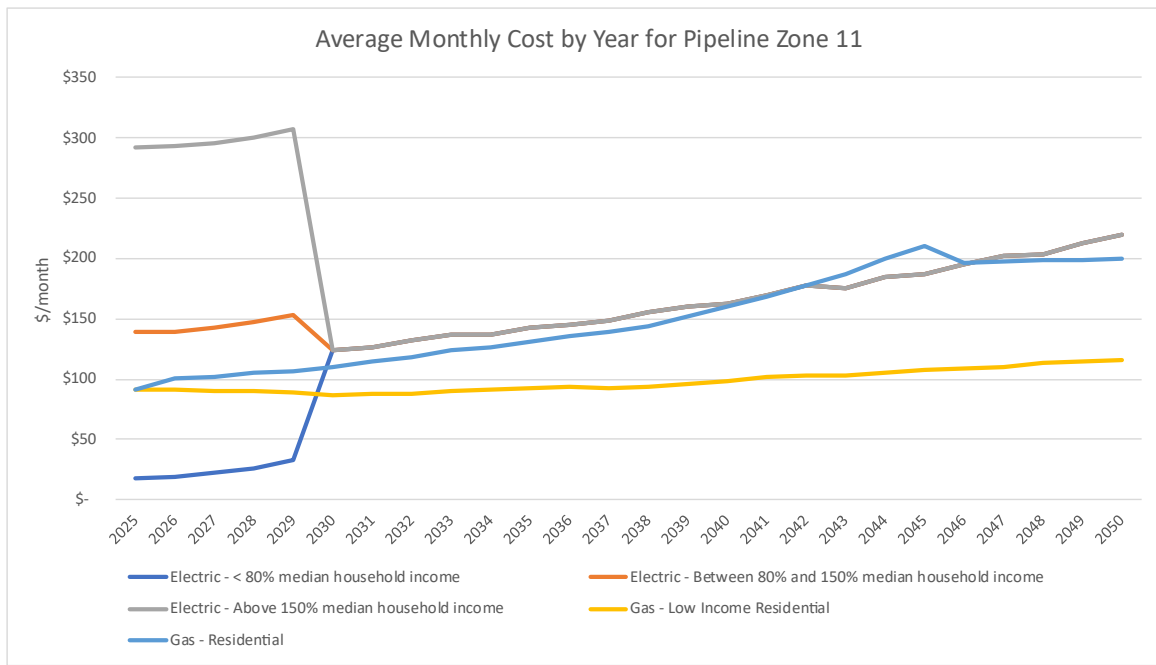
Zone ME-WA

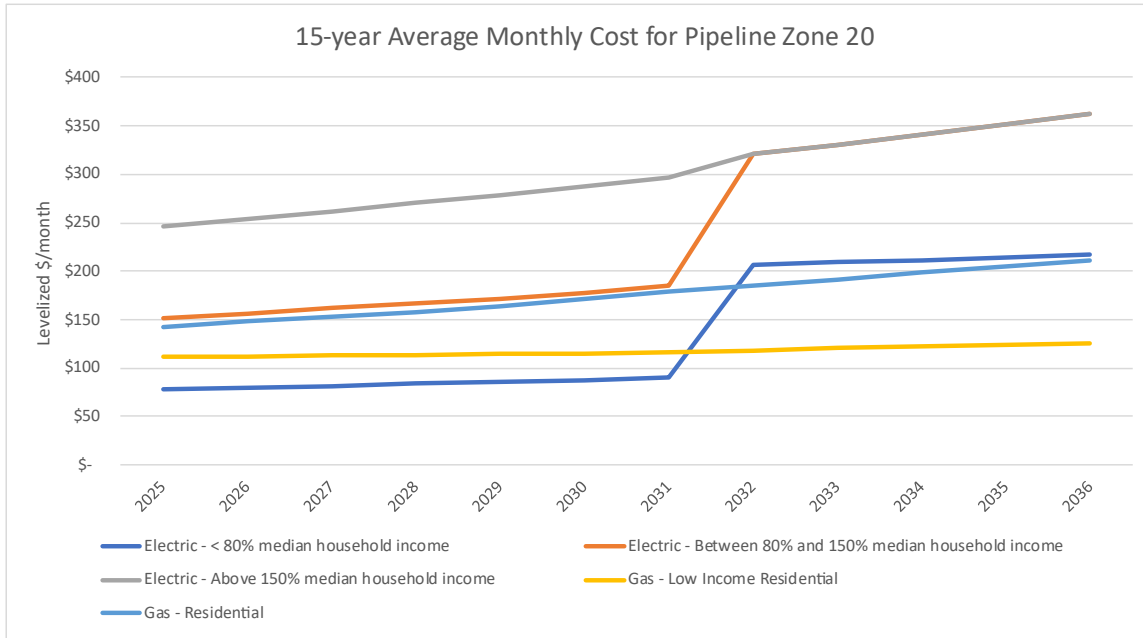
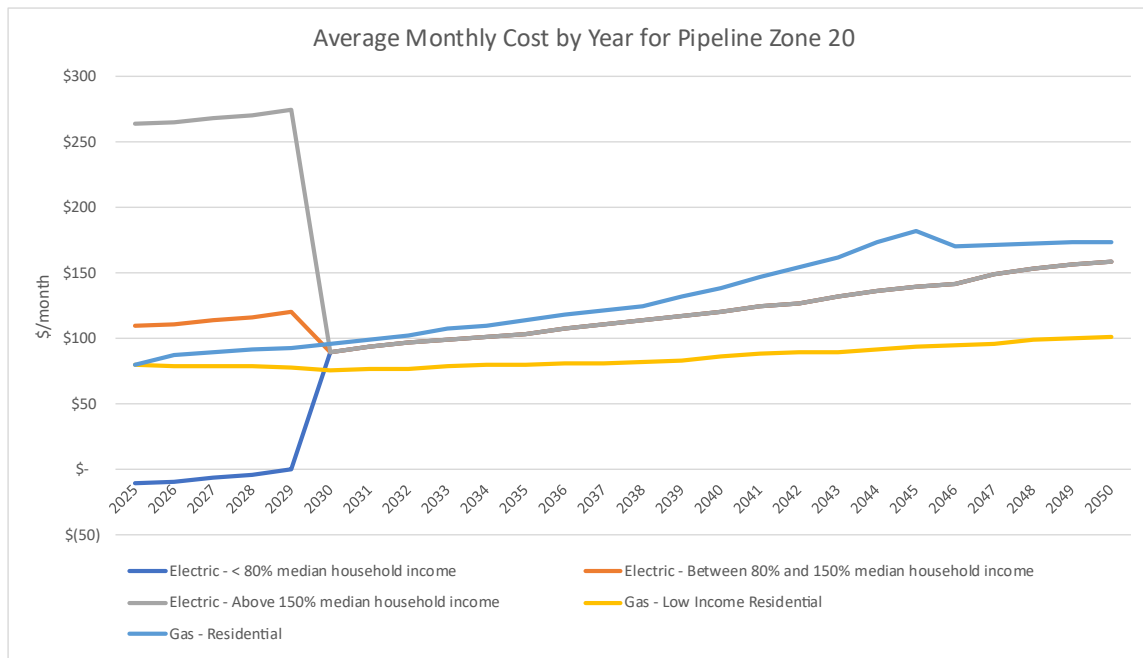
(This page intentionally left blank)

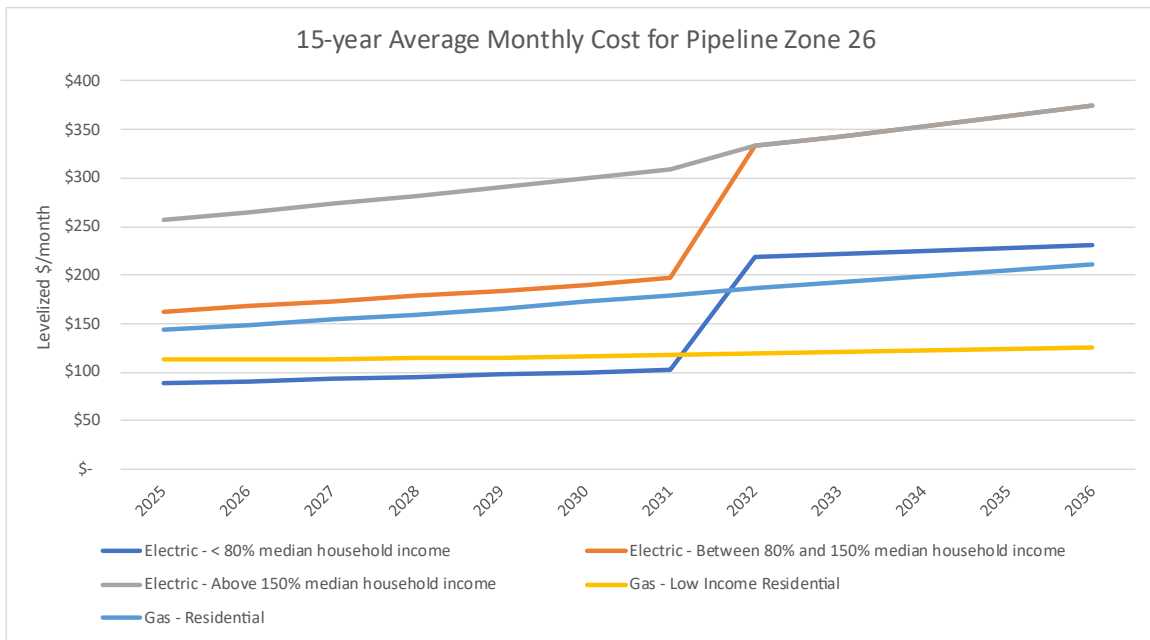
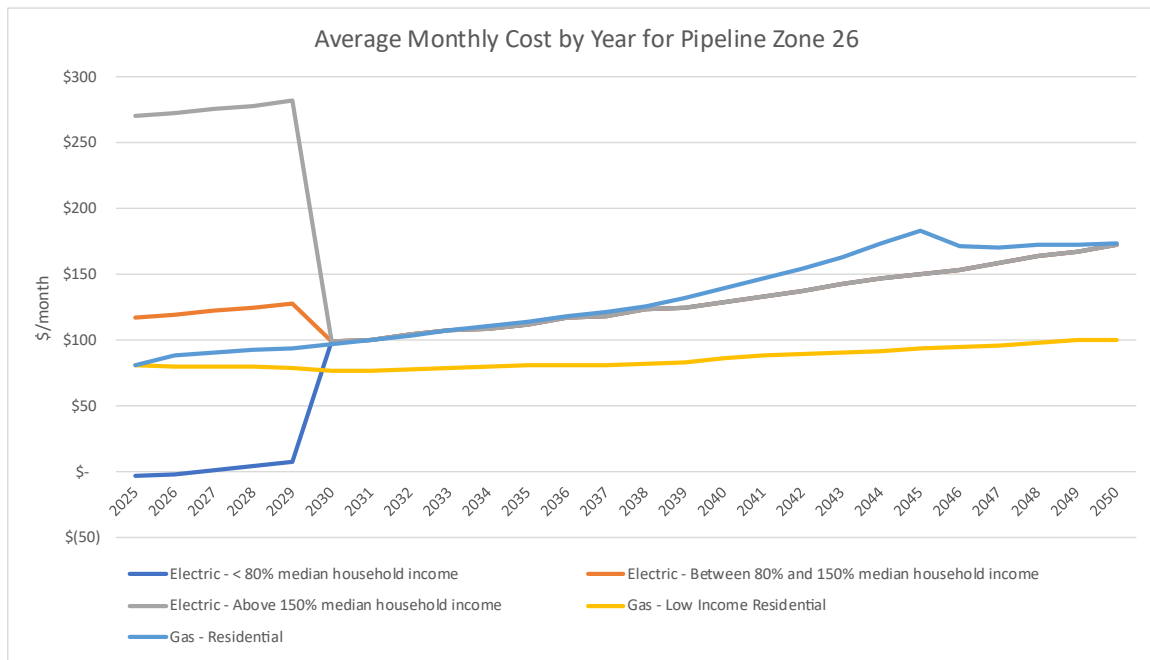
Reference Case – Customer Perspective (Rebates, Incentives, and Furnace Cost Reduction Included)

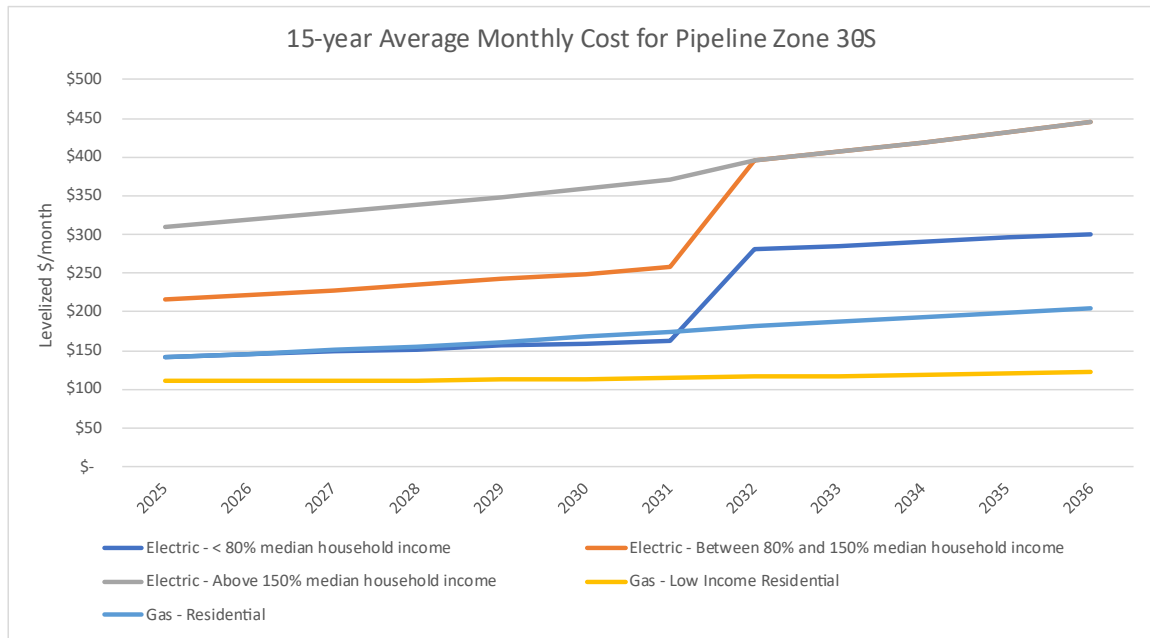
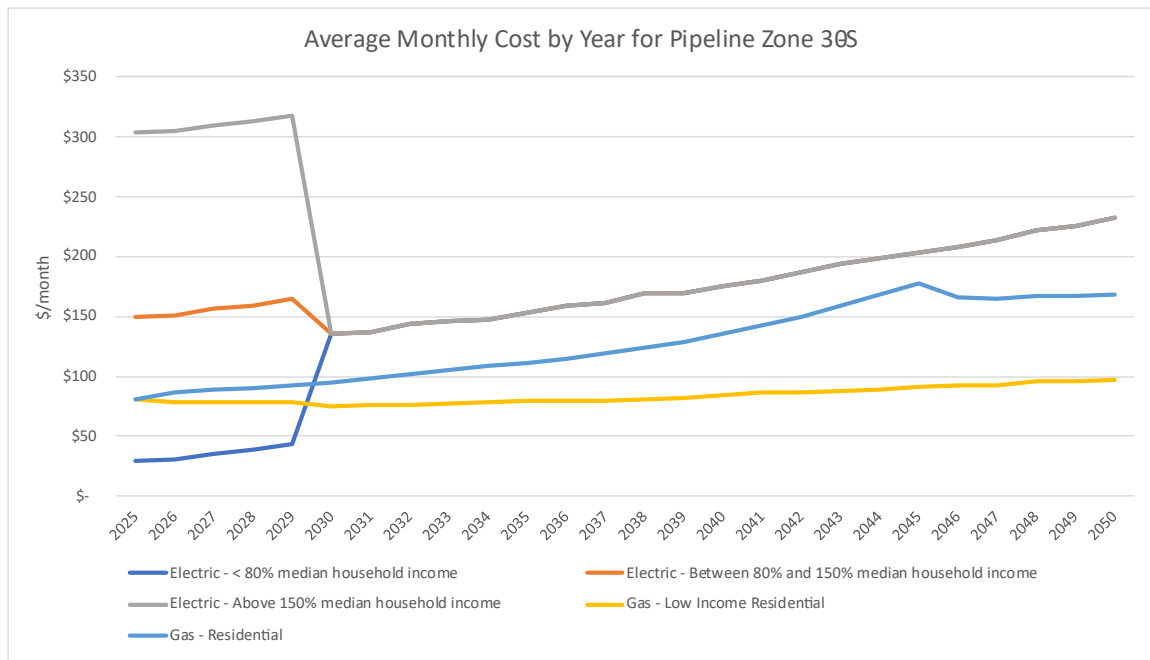
Zone 10

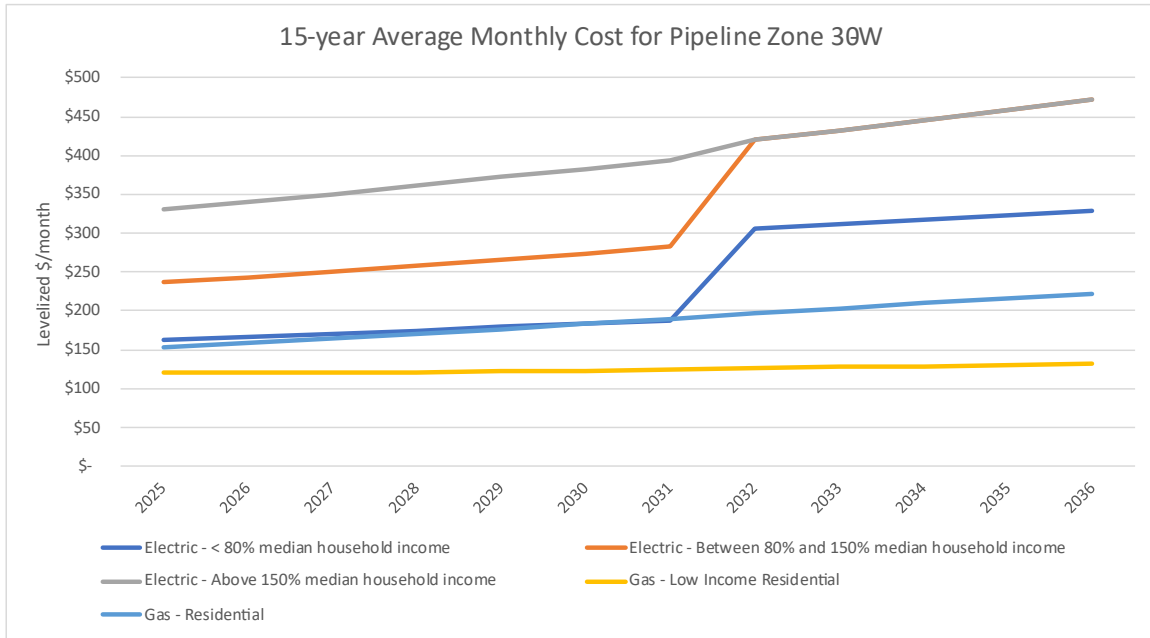
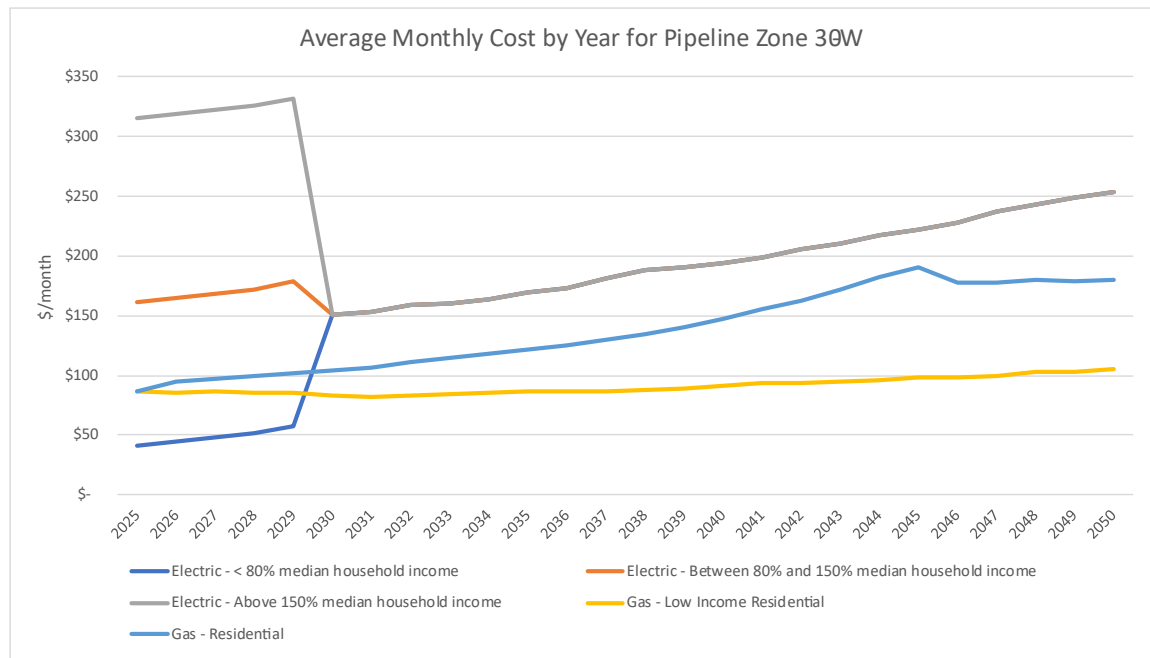


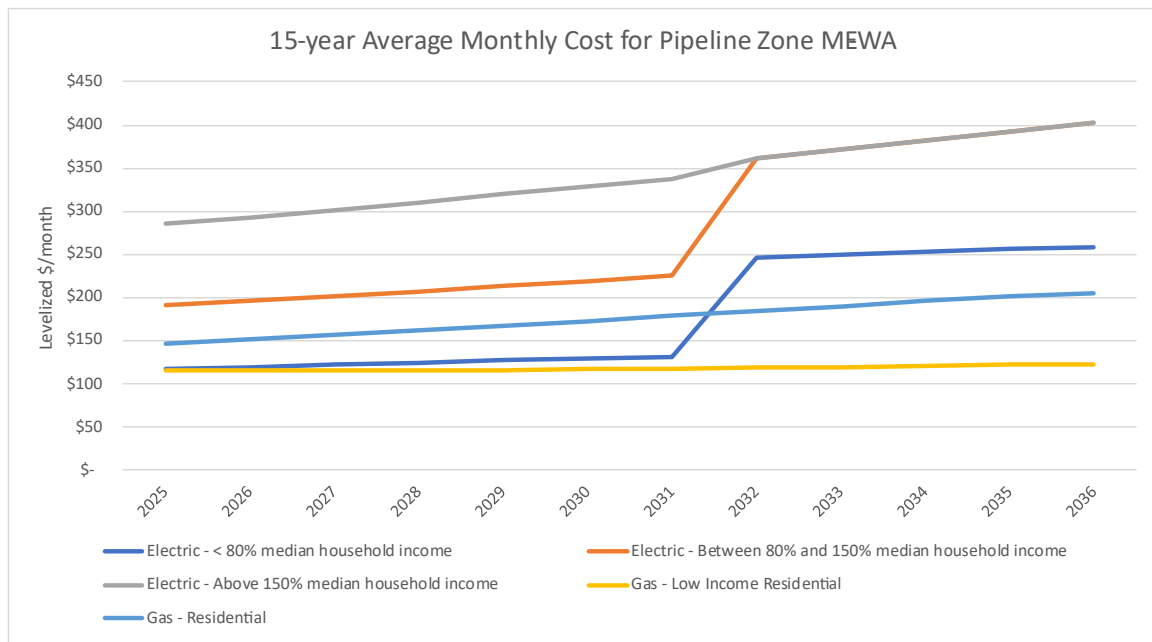
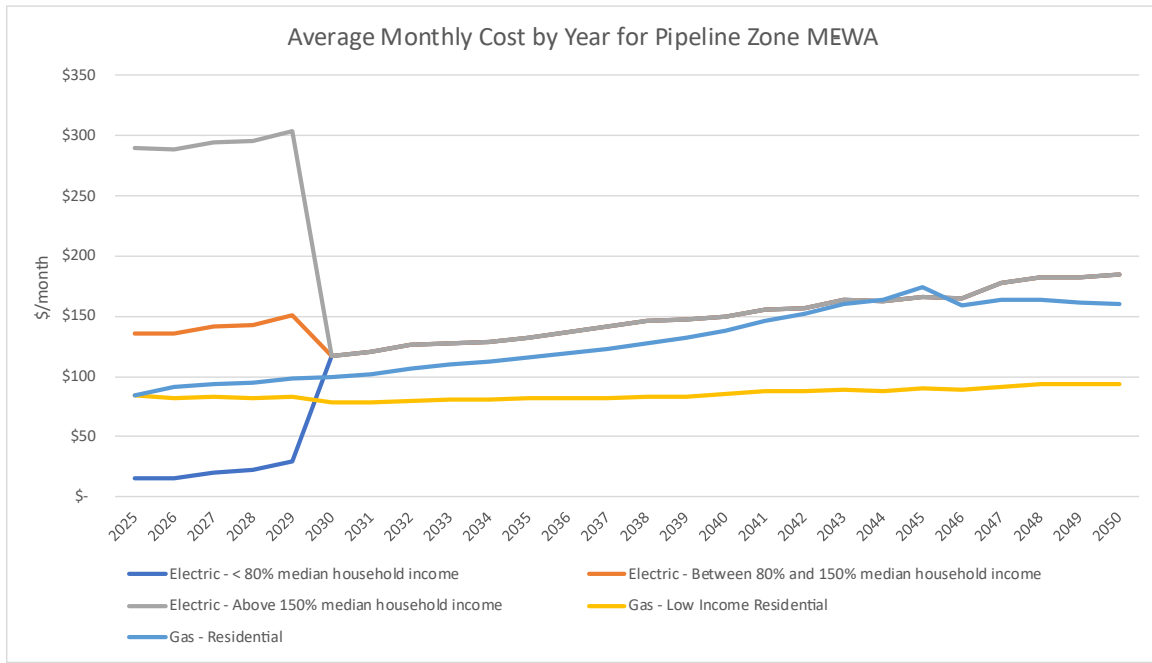
Zone 11

Zone 20

Zone 26

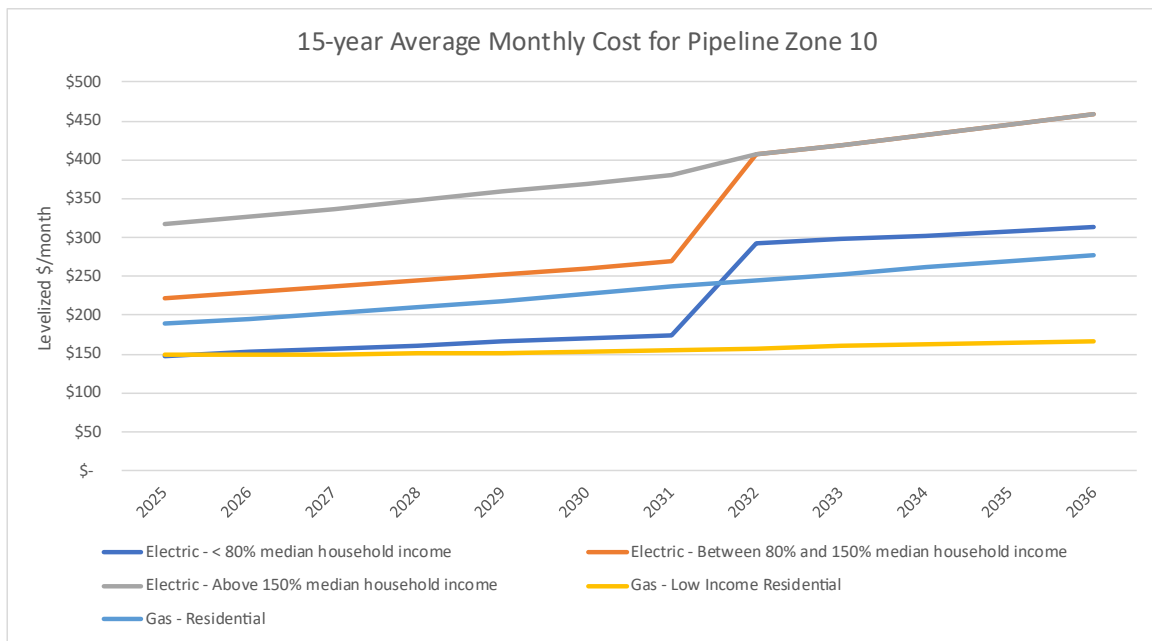
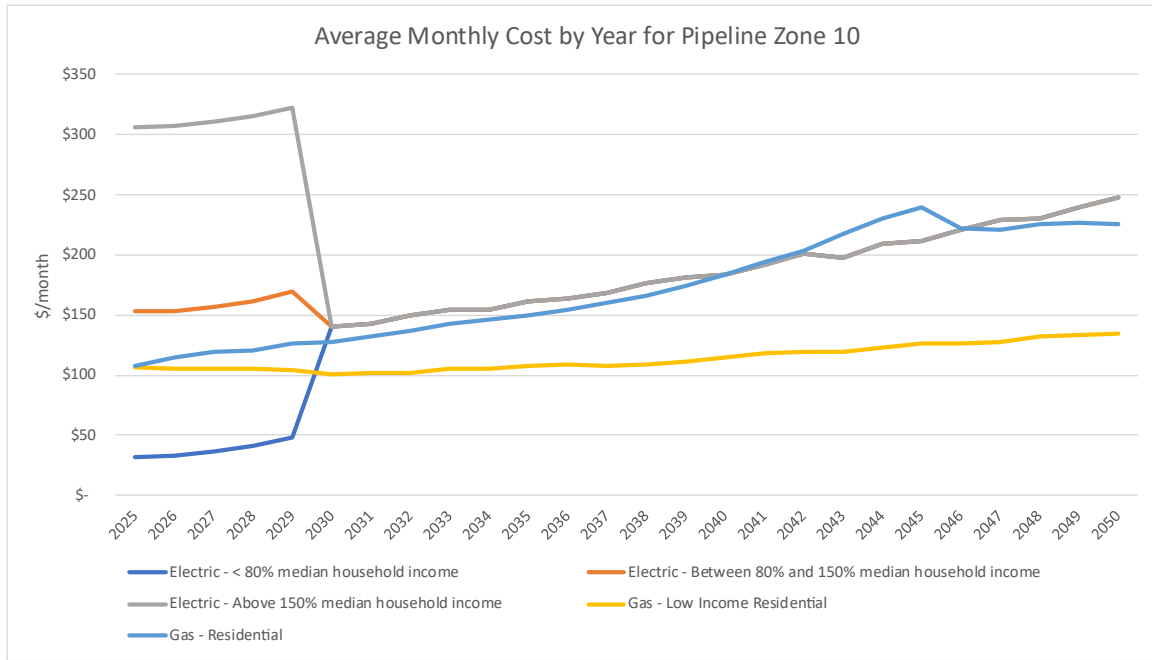
Zone 30-S

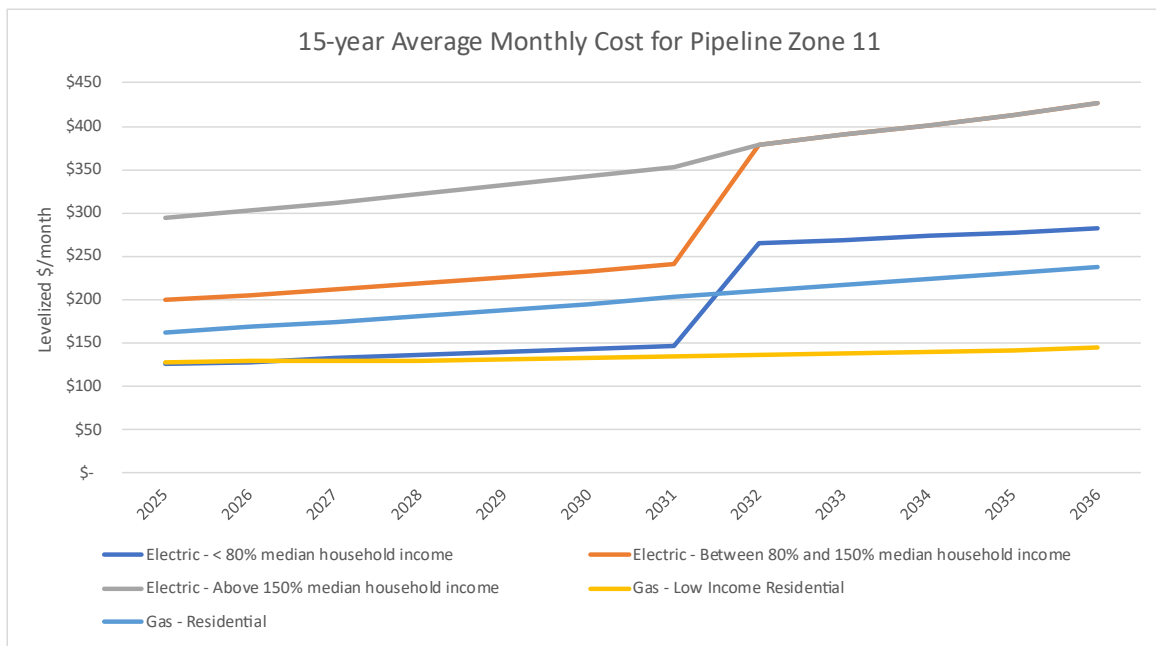
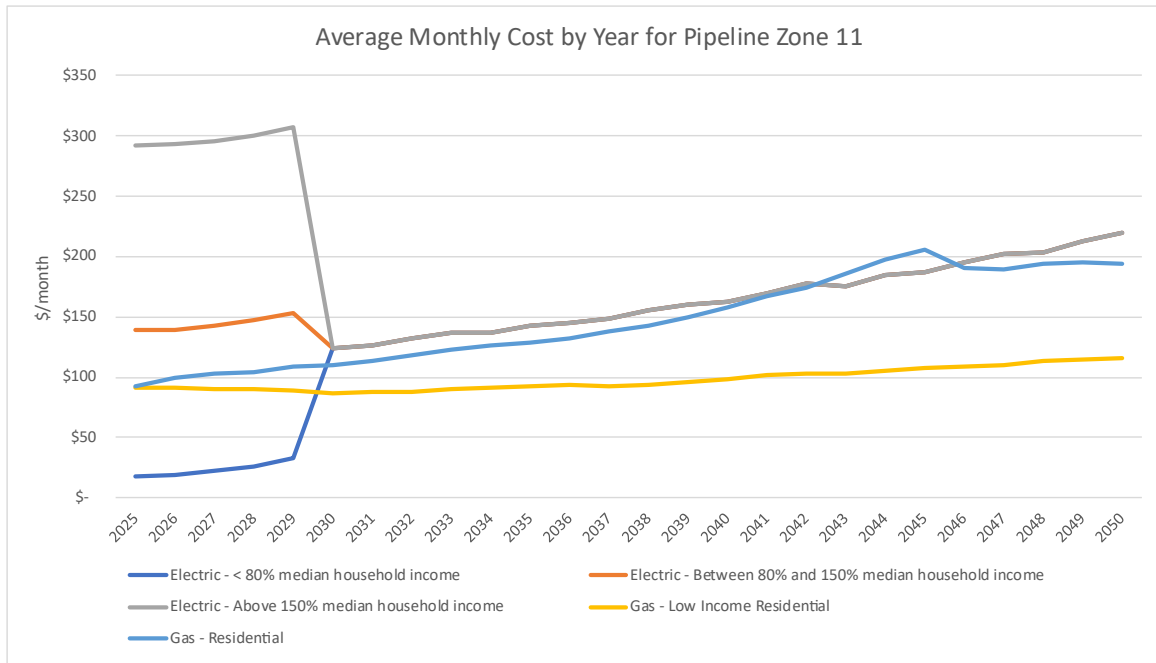
Zone 30-W

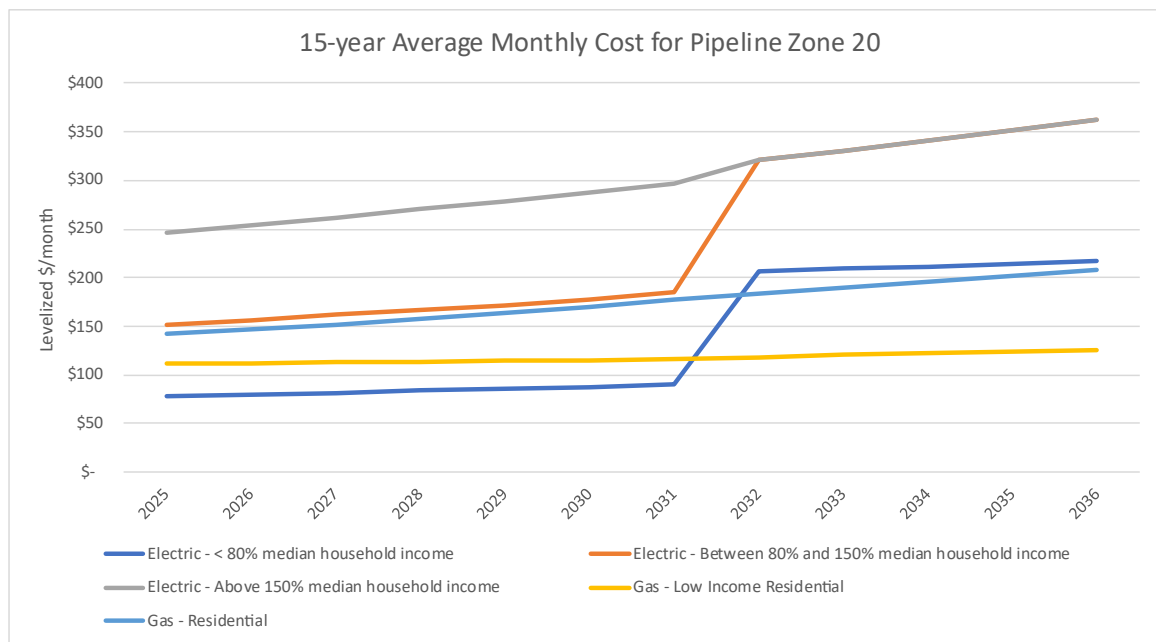
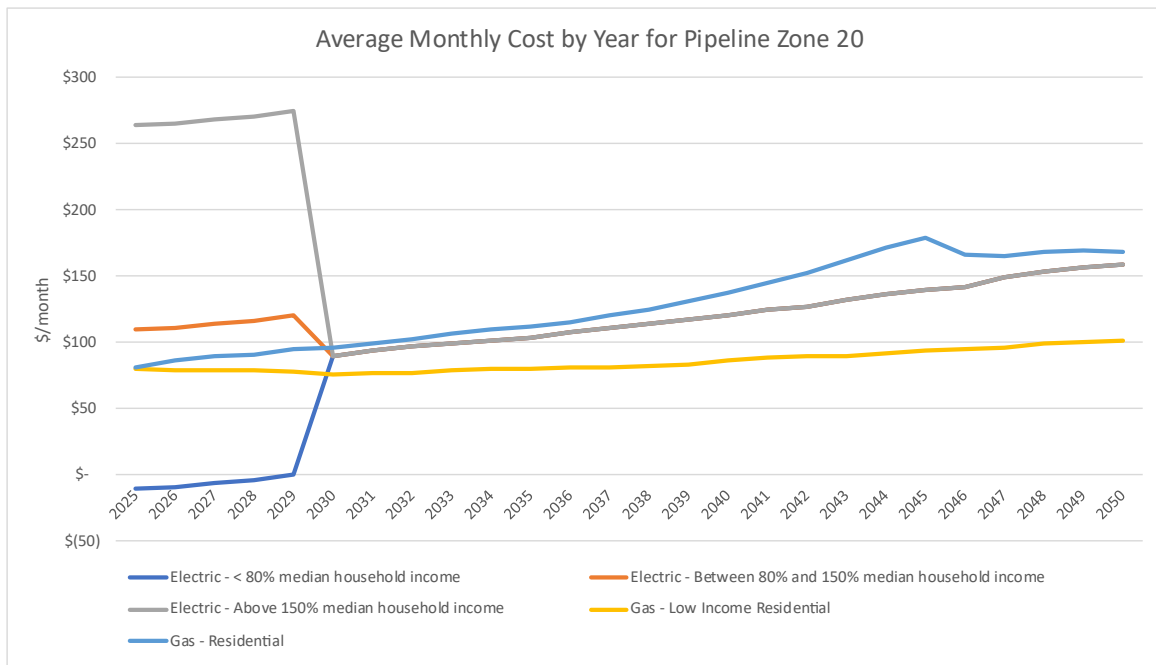
Zone ME-WA

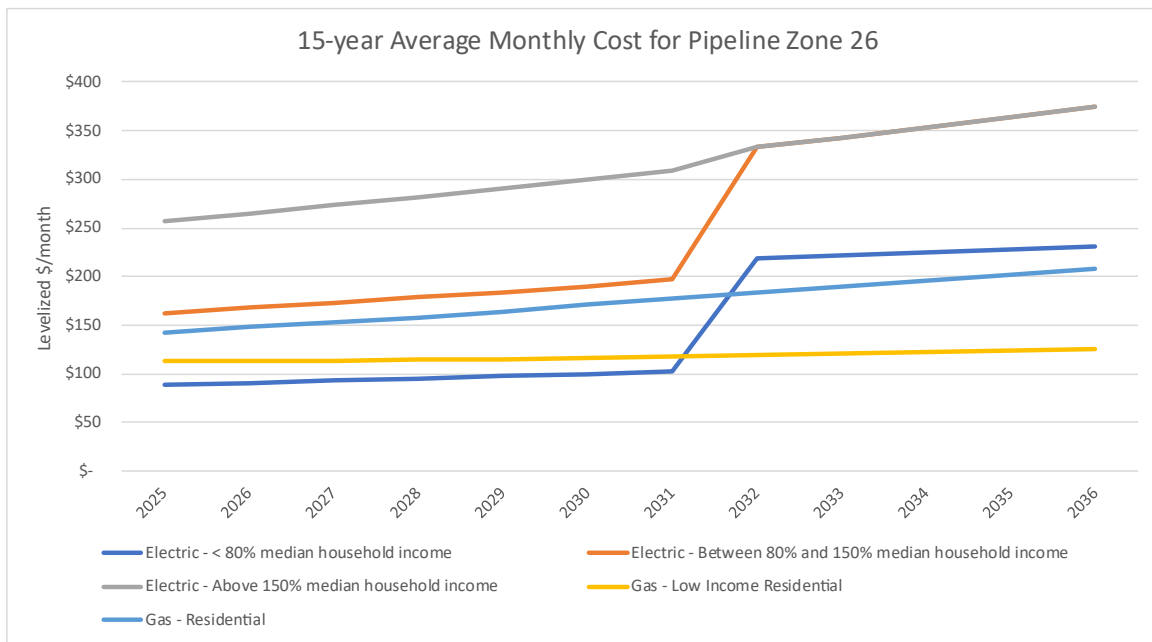
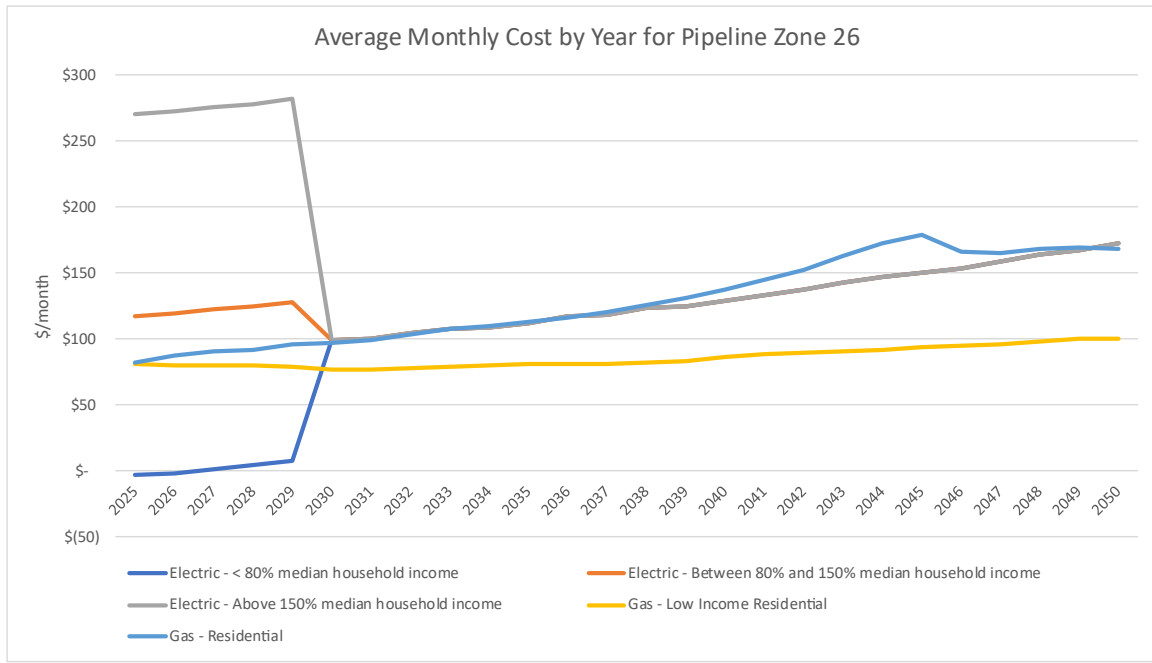
Low Growth Case - Customer Perspective (Furnace Cost Reduction Included)

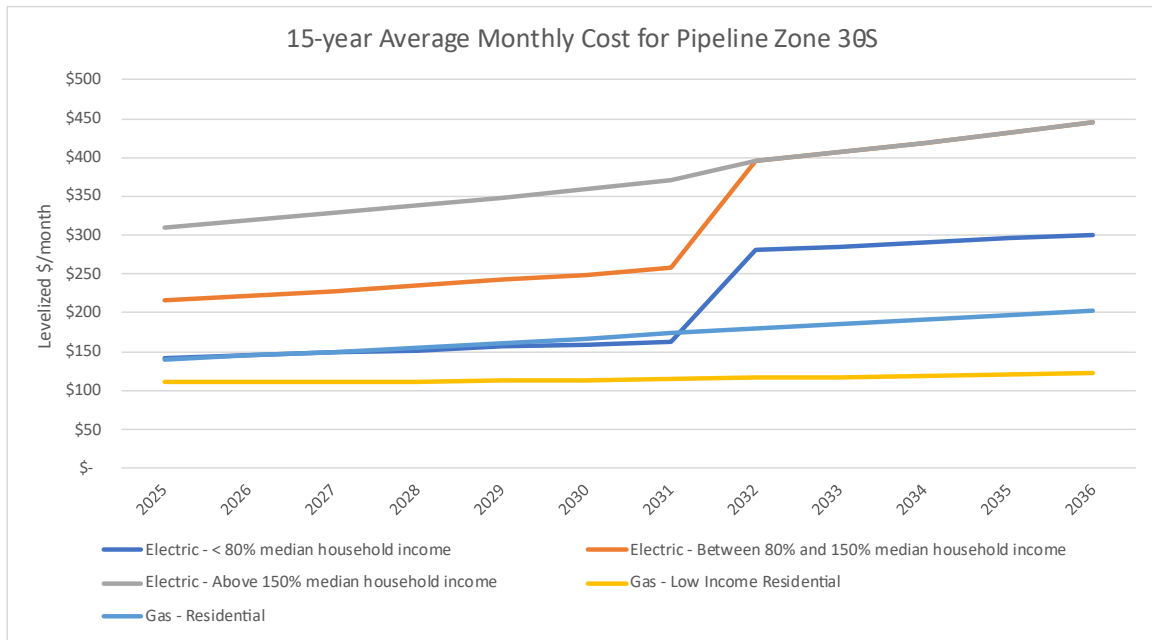
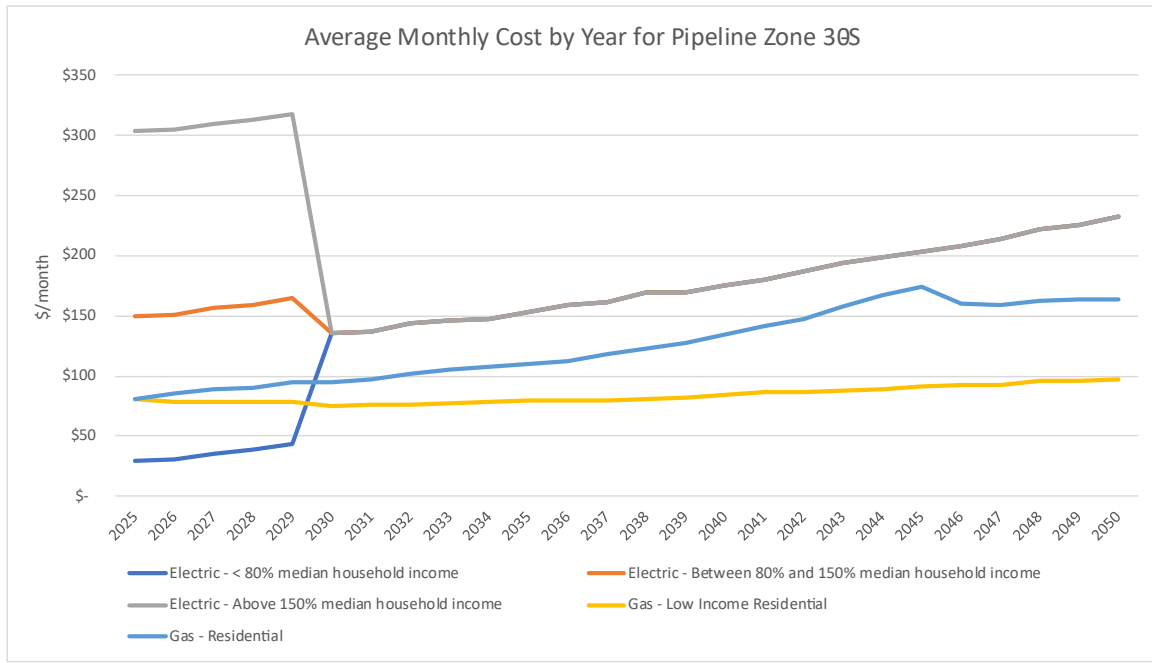
Zone 10

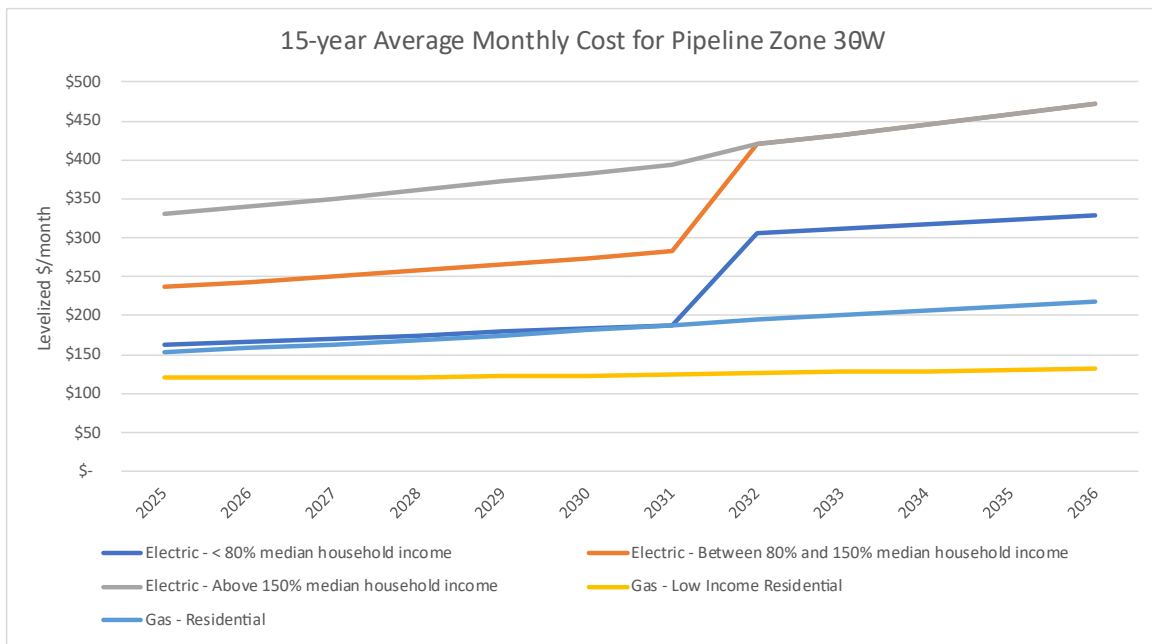
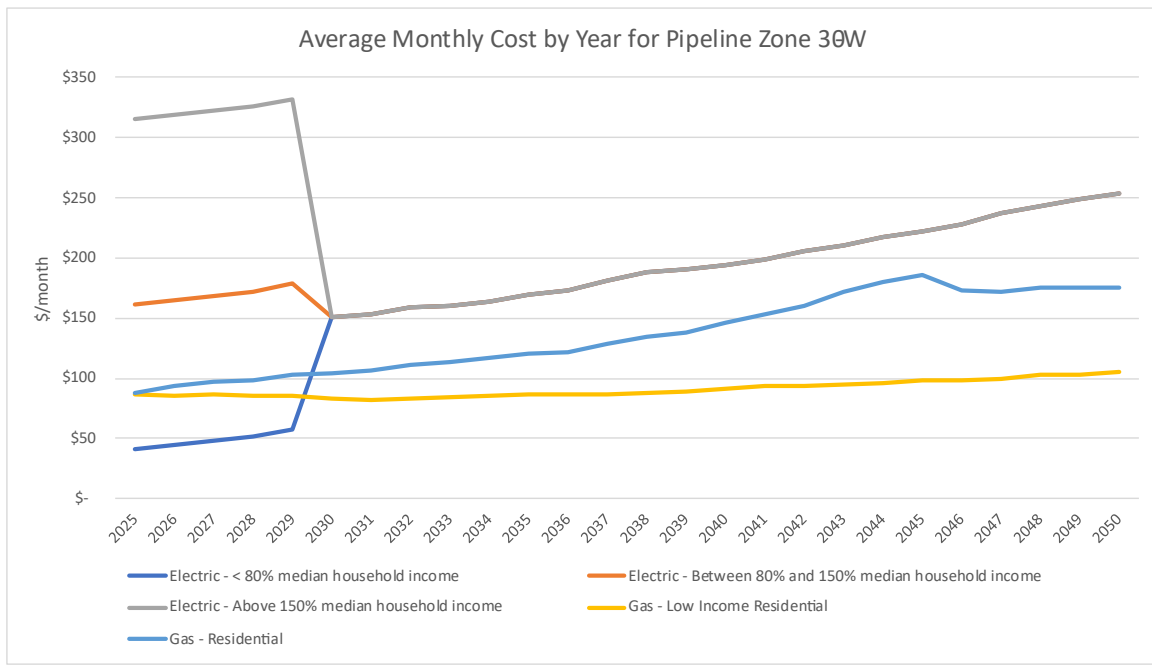


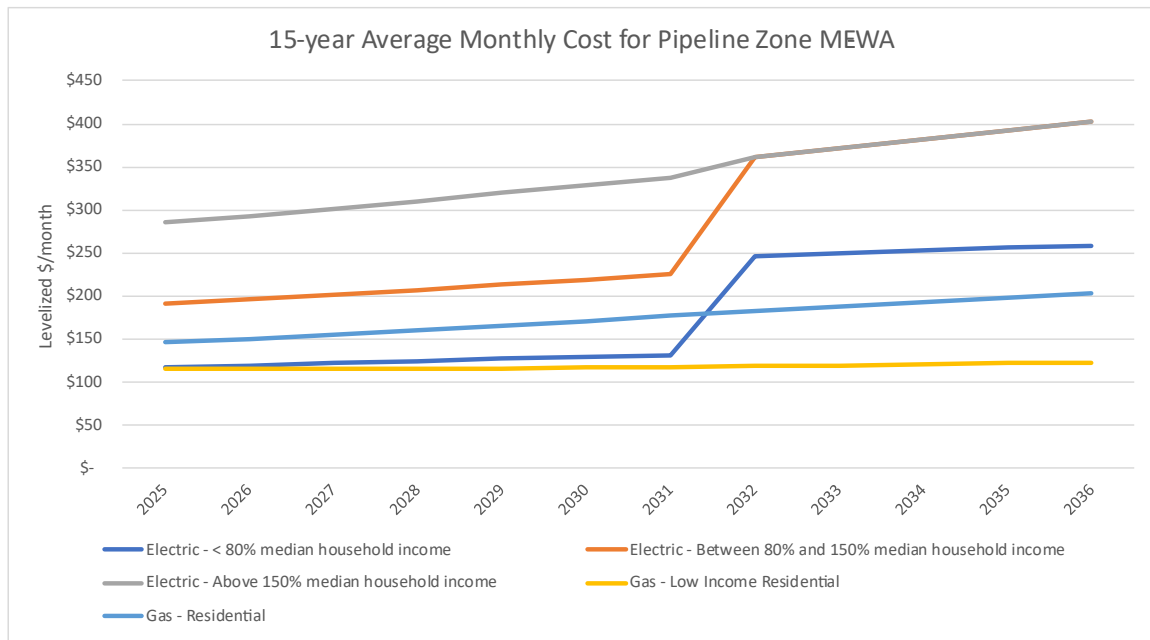
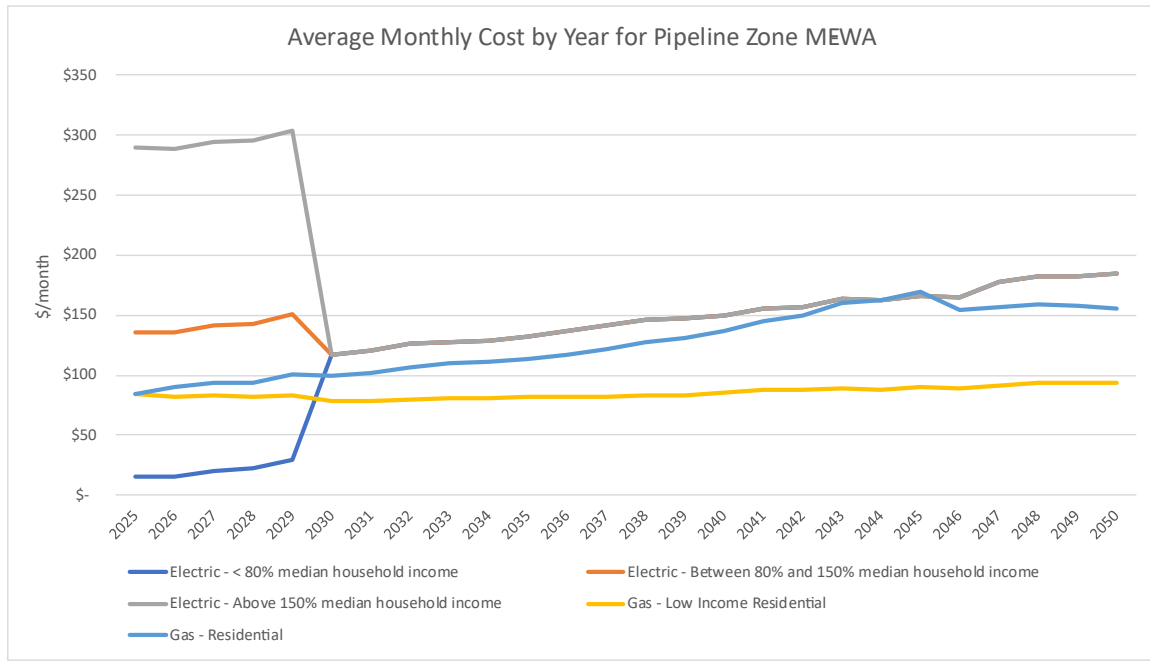
Zone 11

Zone 20

Zone 26

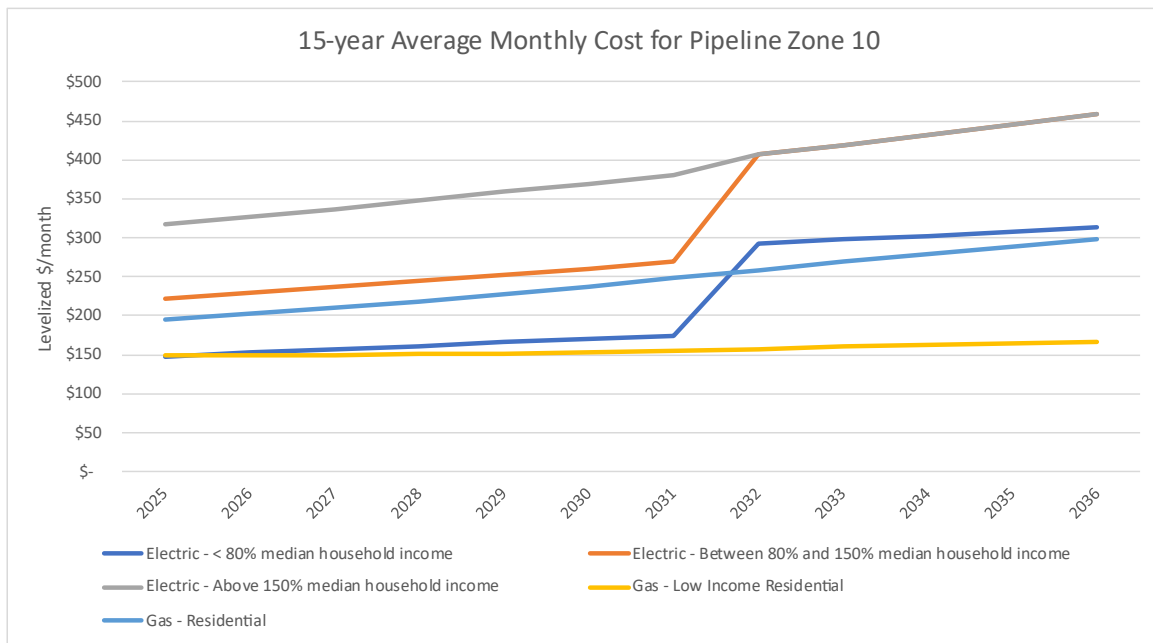
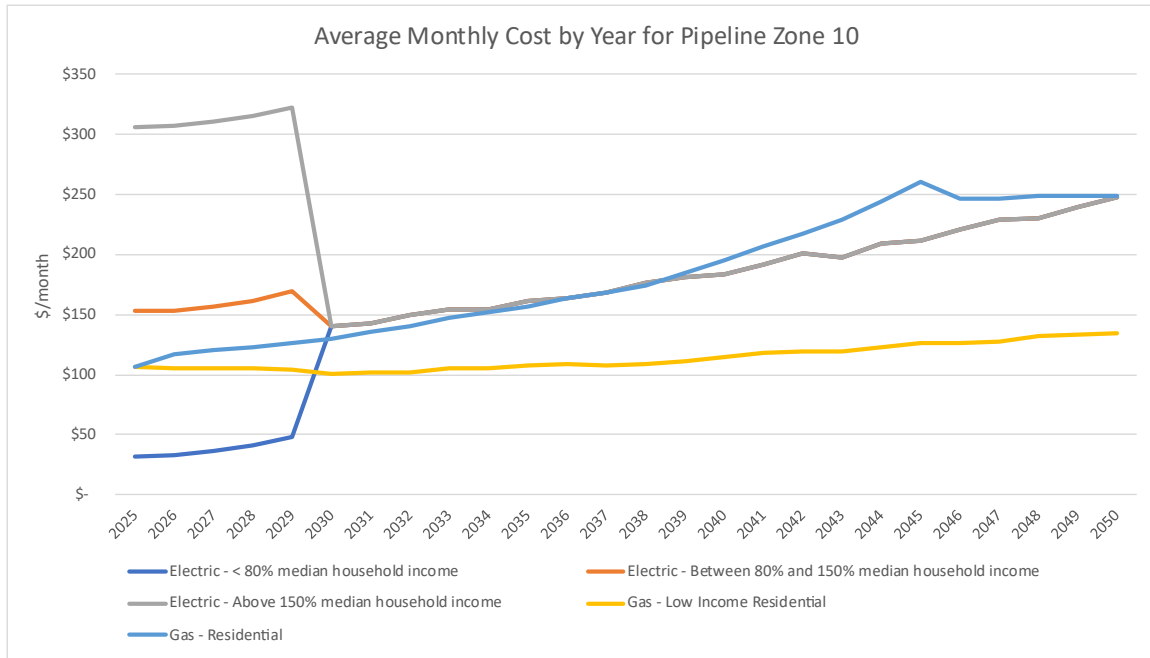
Zone 30-S

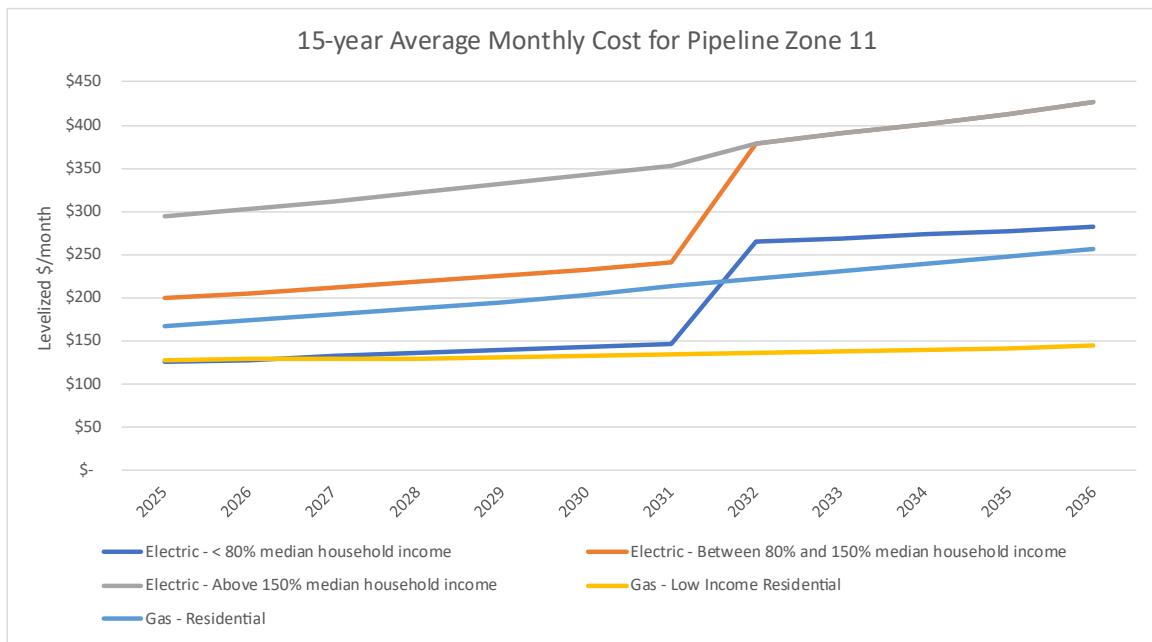
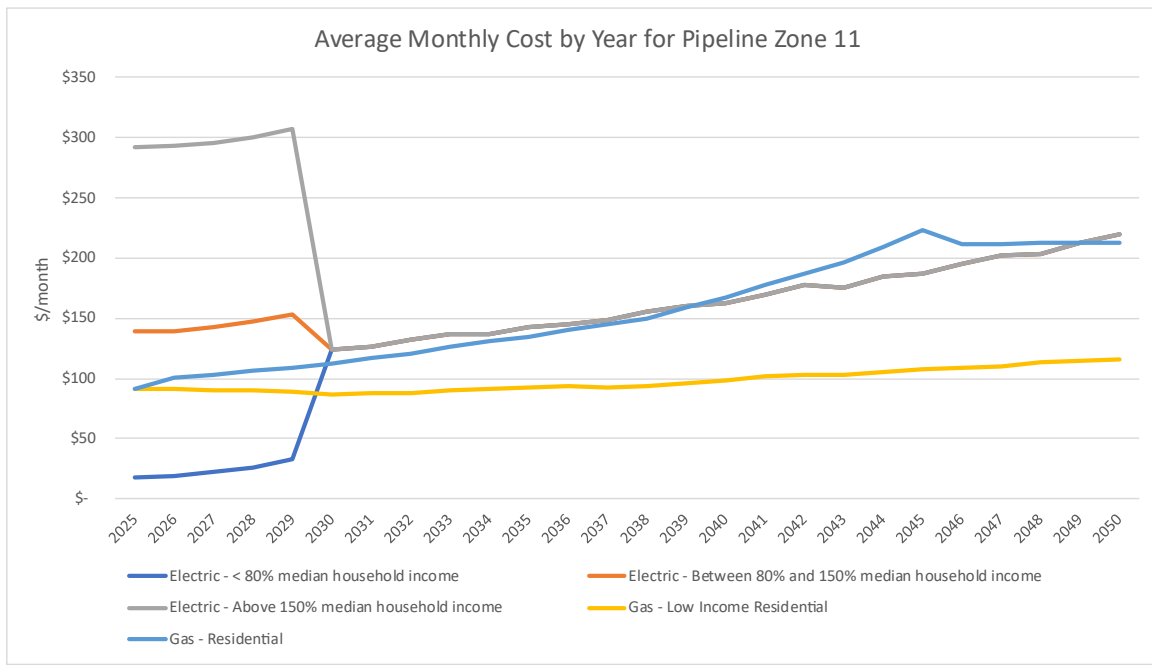
Zone 30-W

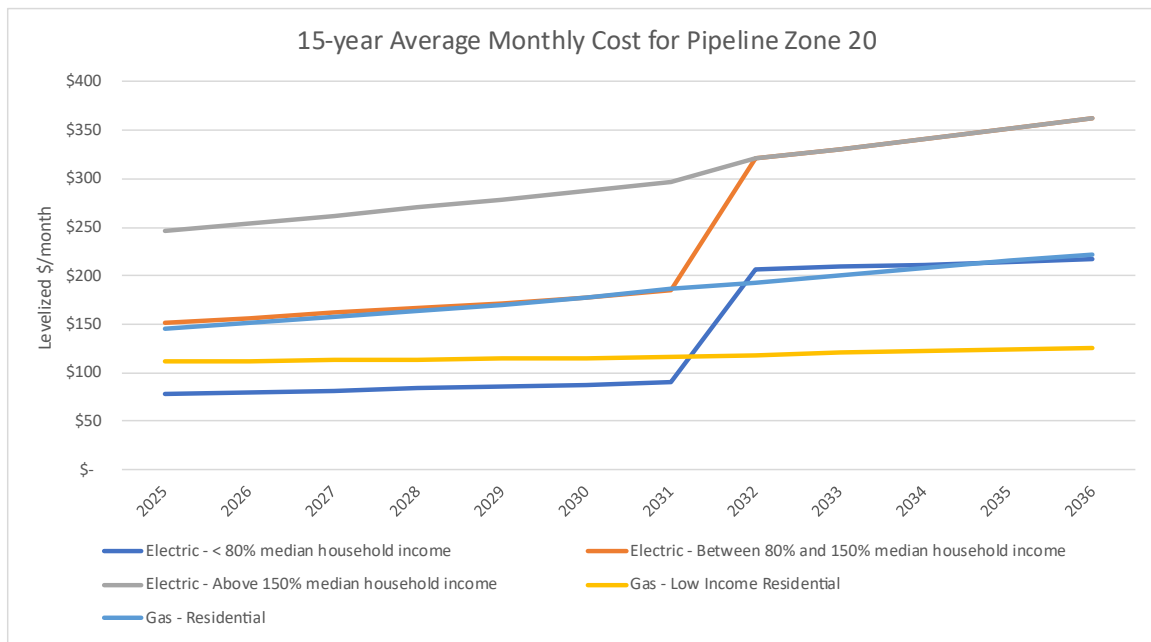
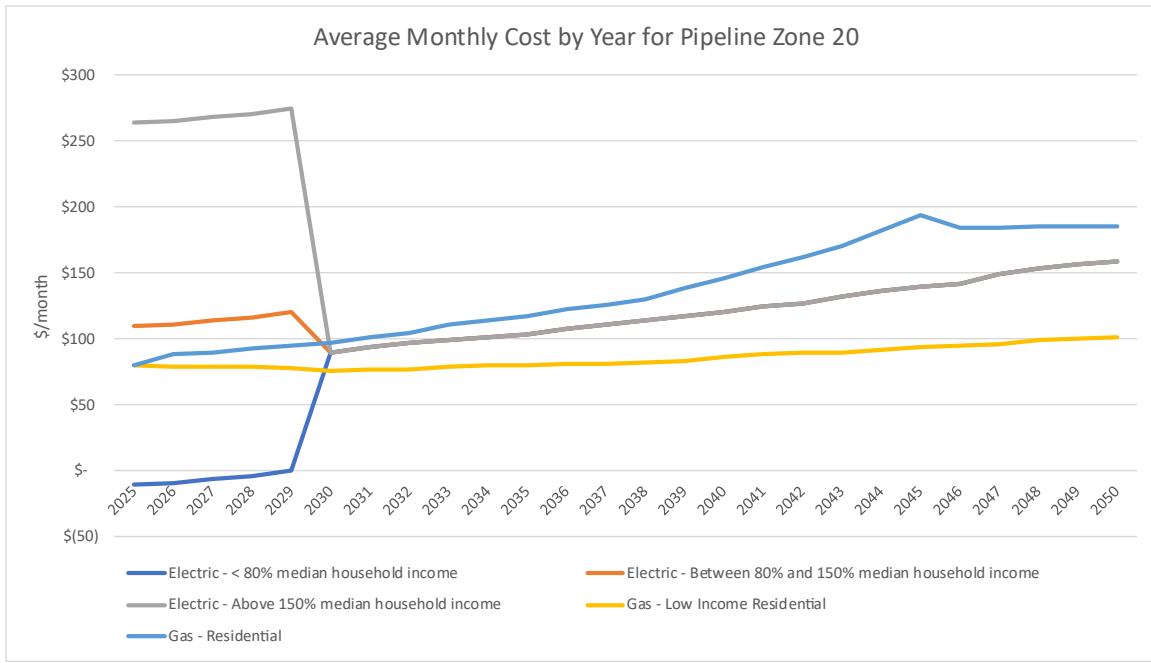
Zone ME-WA

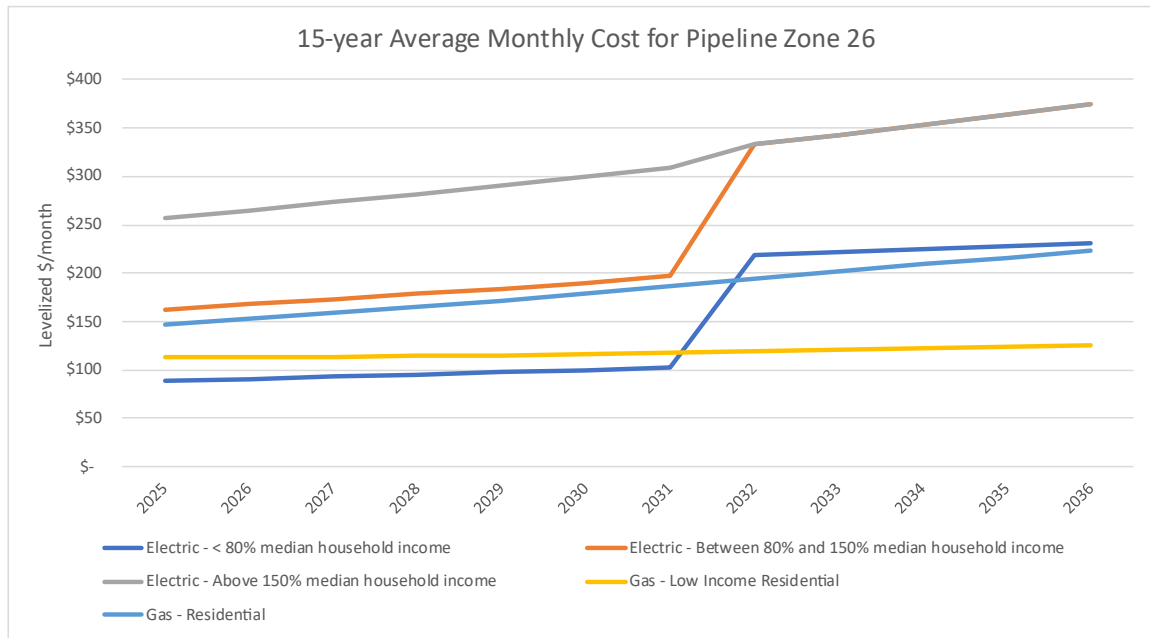
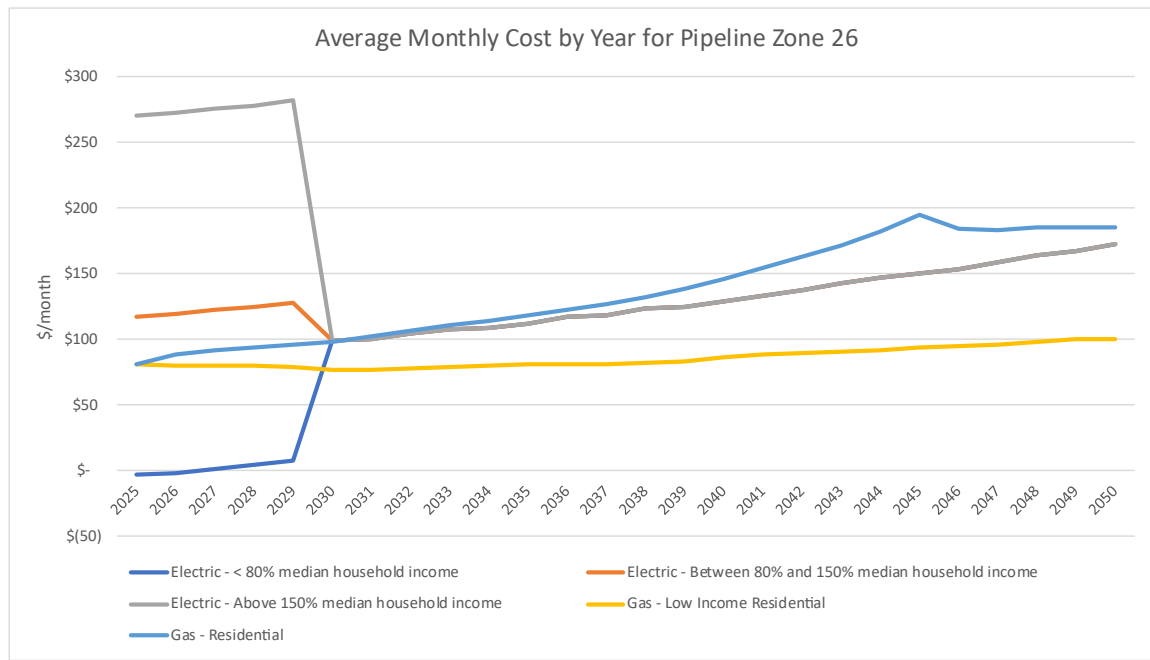
High Growth Case - Customer Perspective (Furnace Cost Reduction Included)

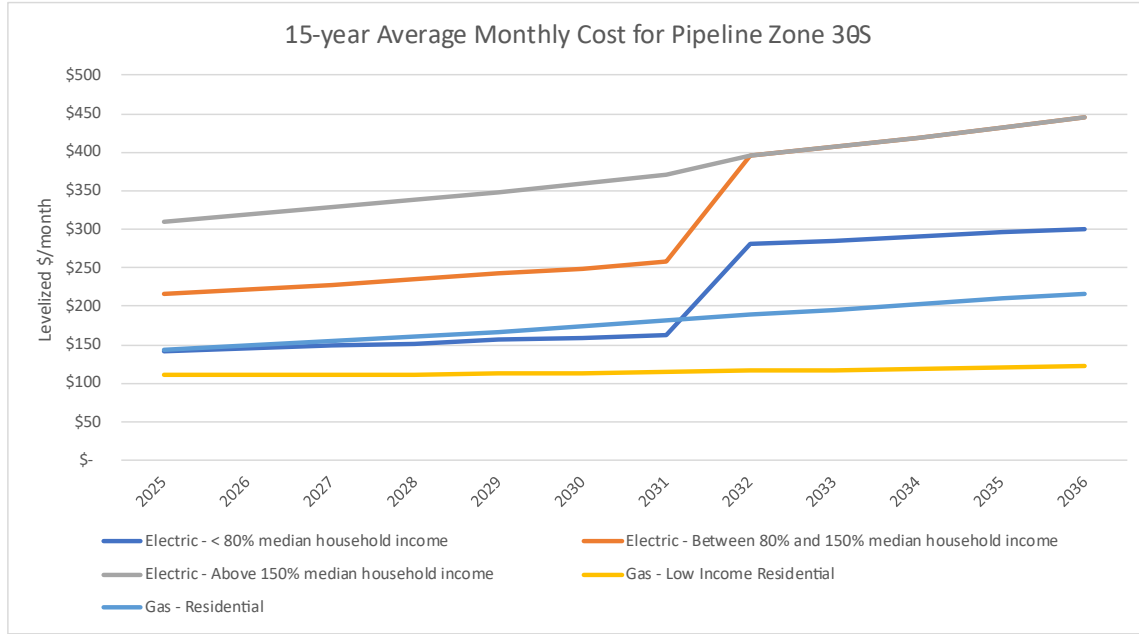
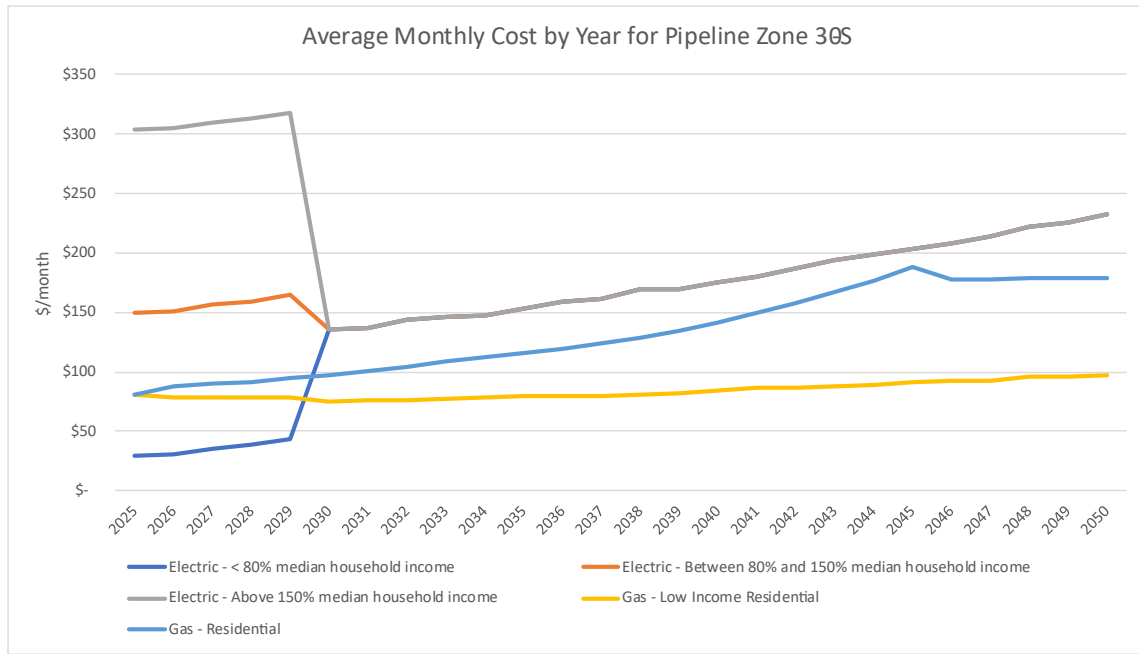
Zone 10

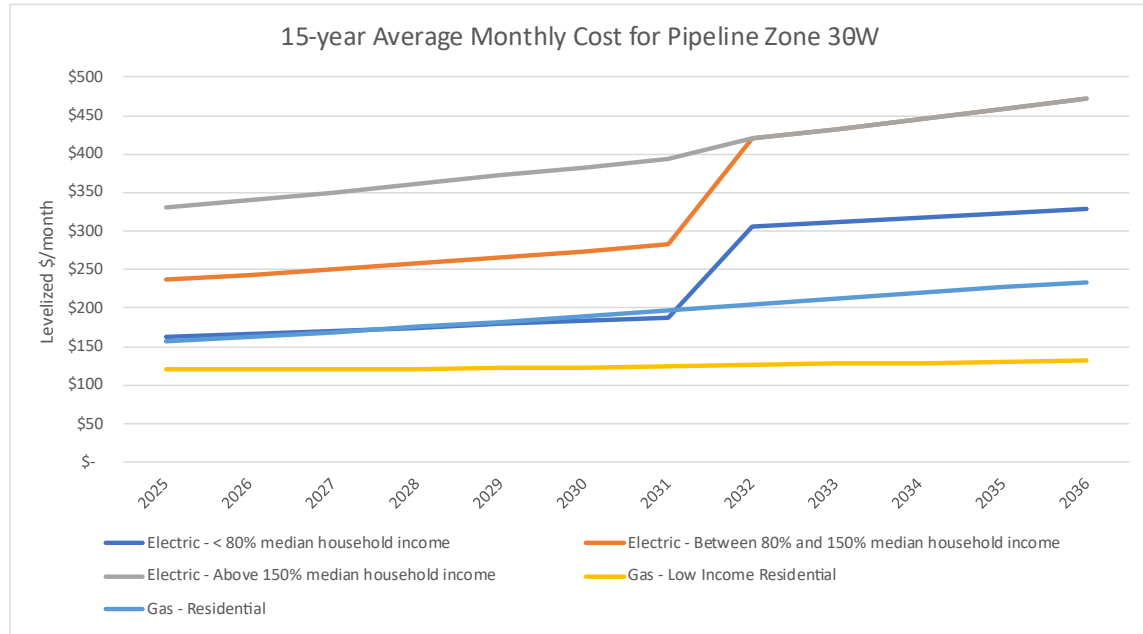
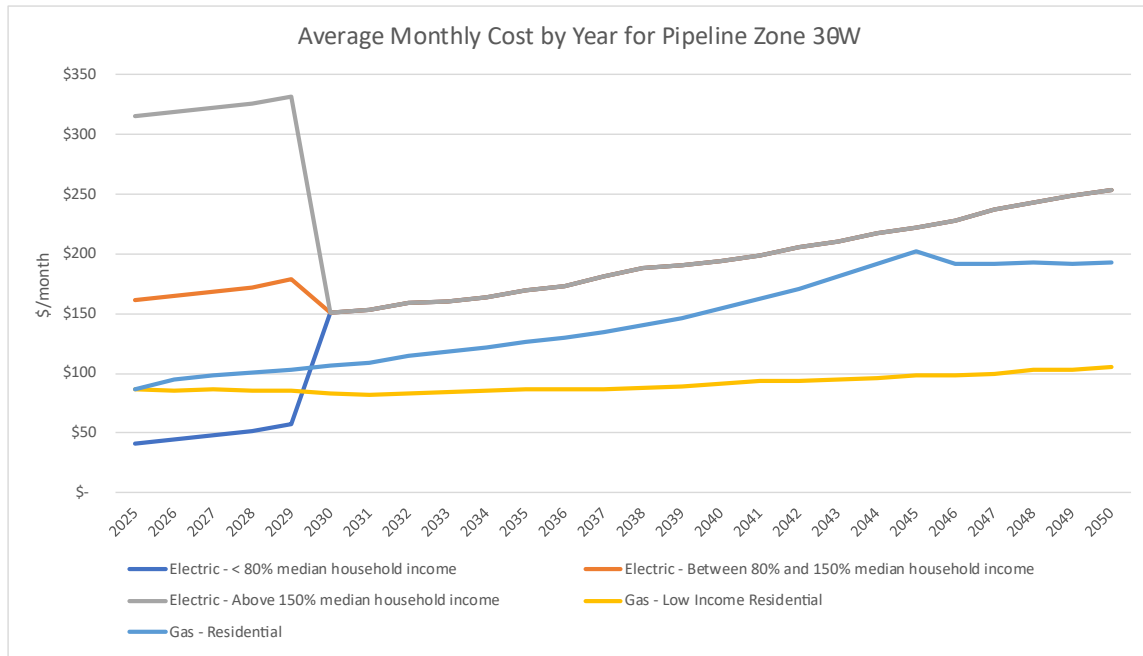


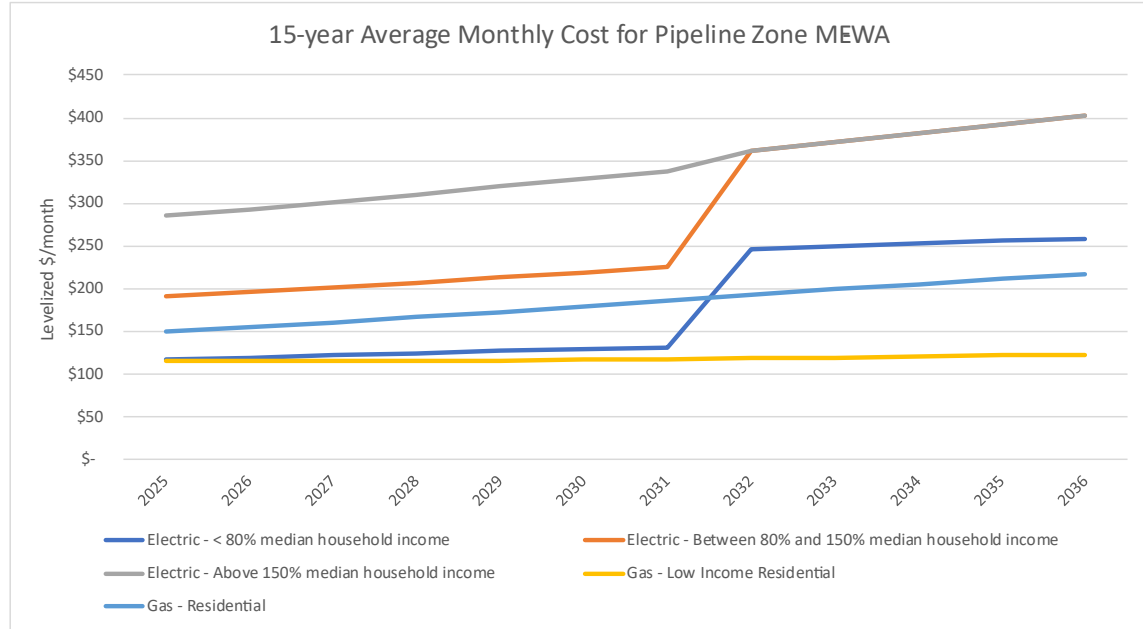
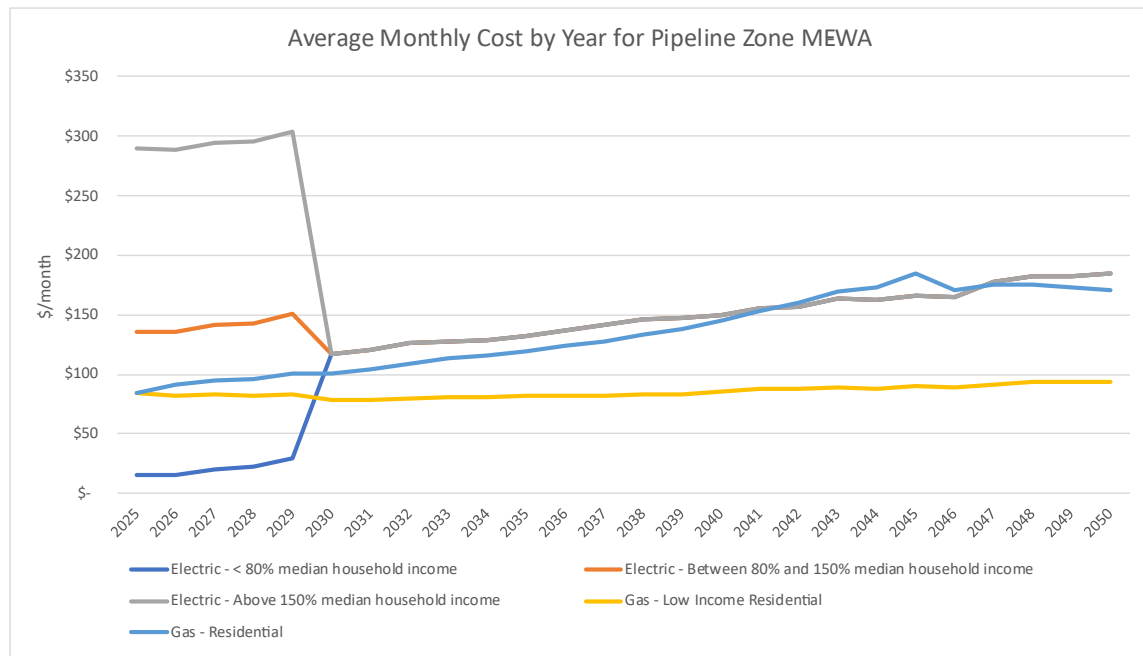
Zone 11

Zone 20

Zone 26

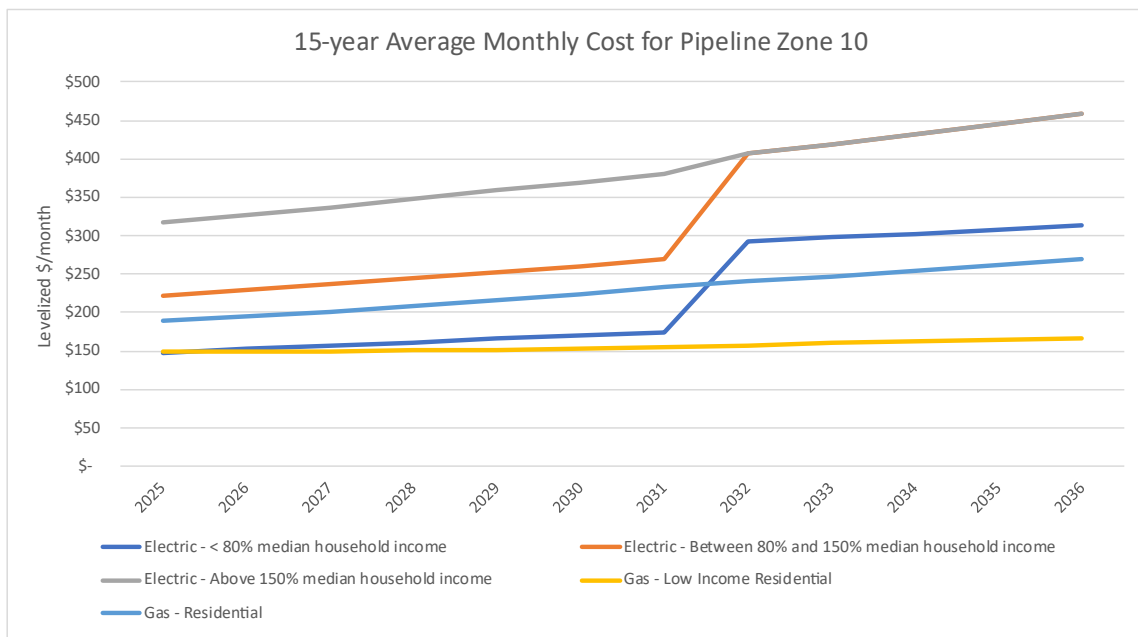
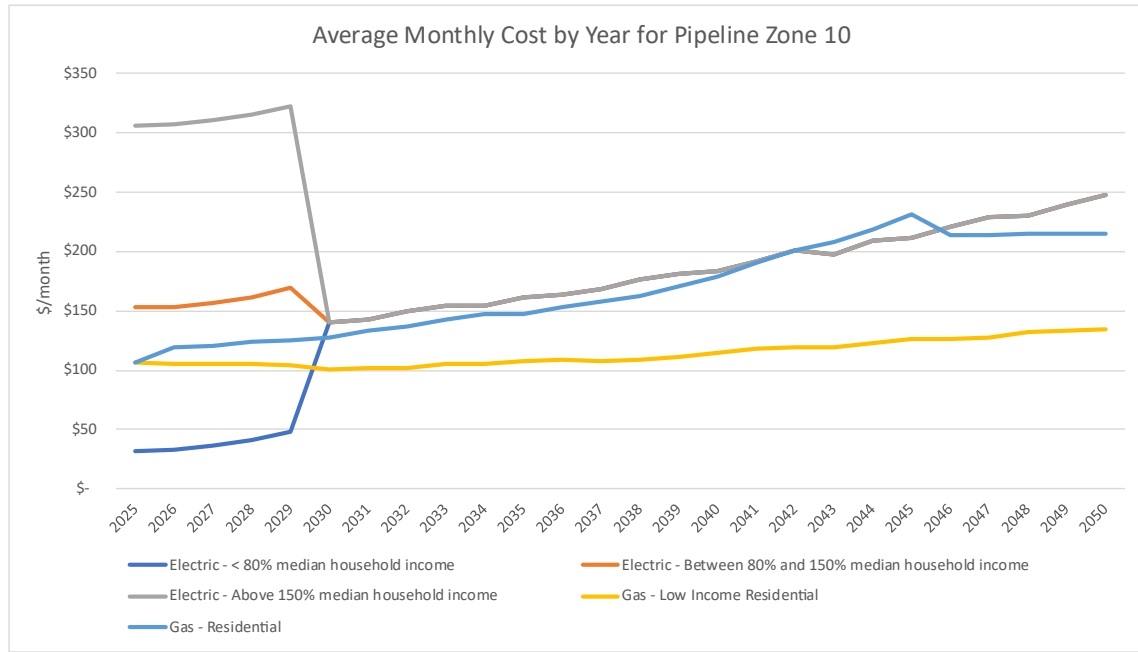
Zone 30-S

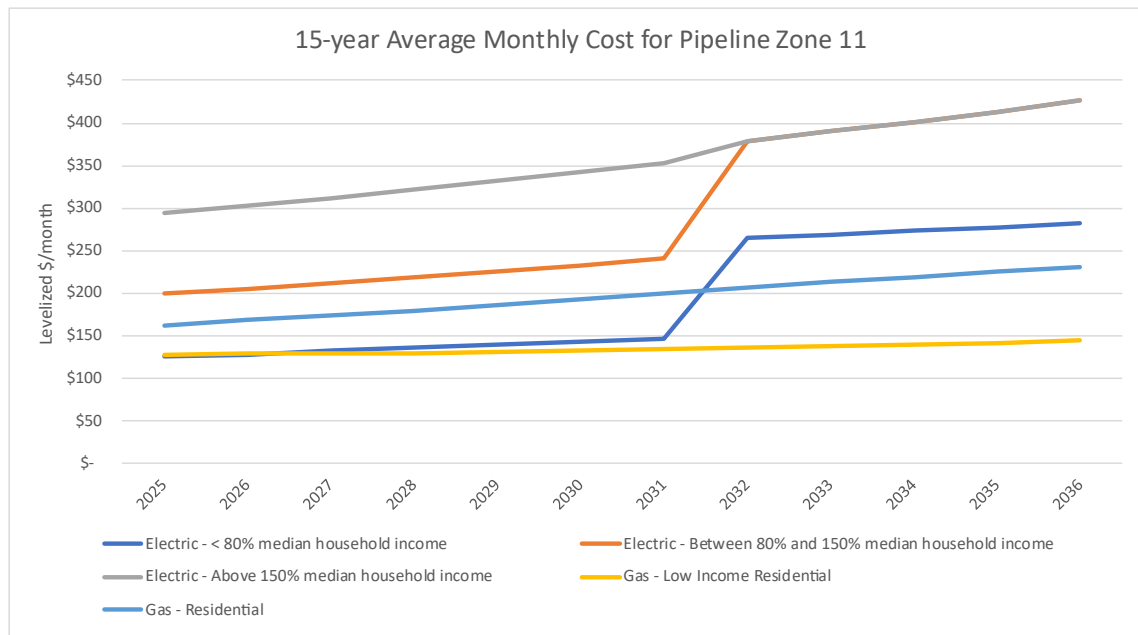
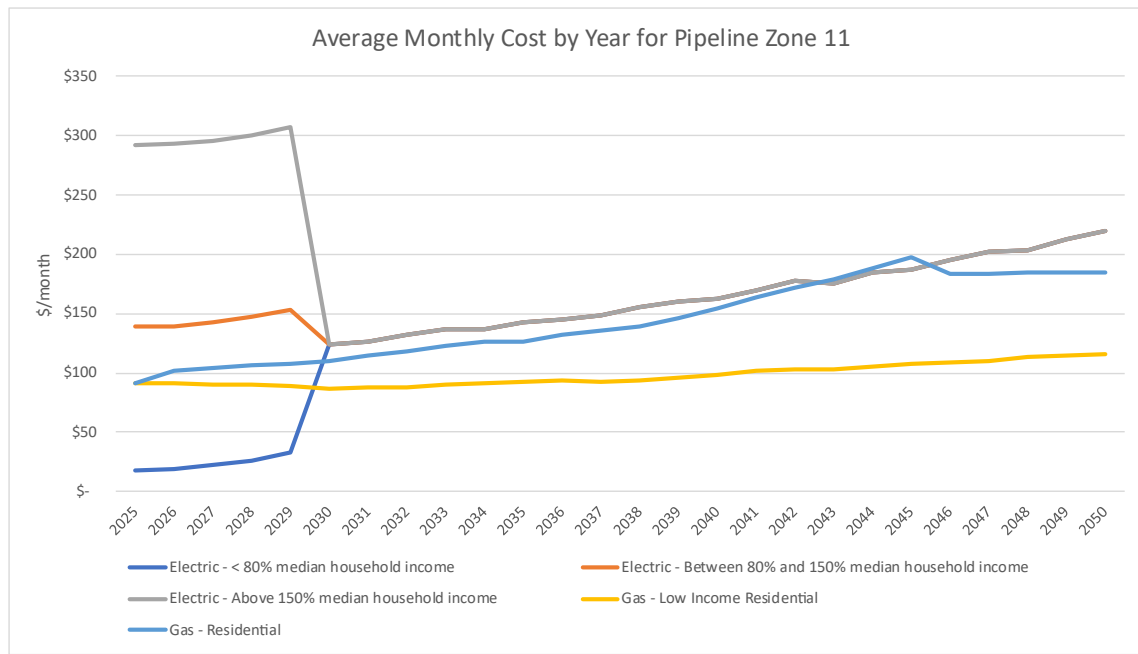
Zone 30-W

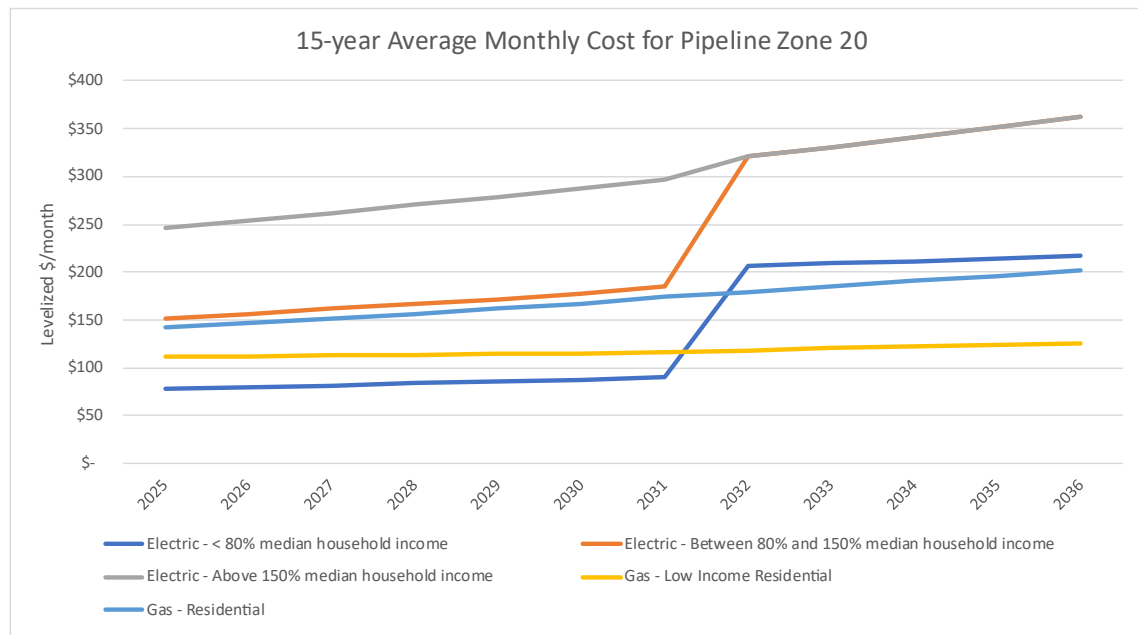
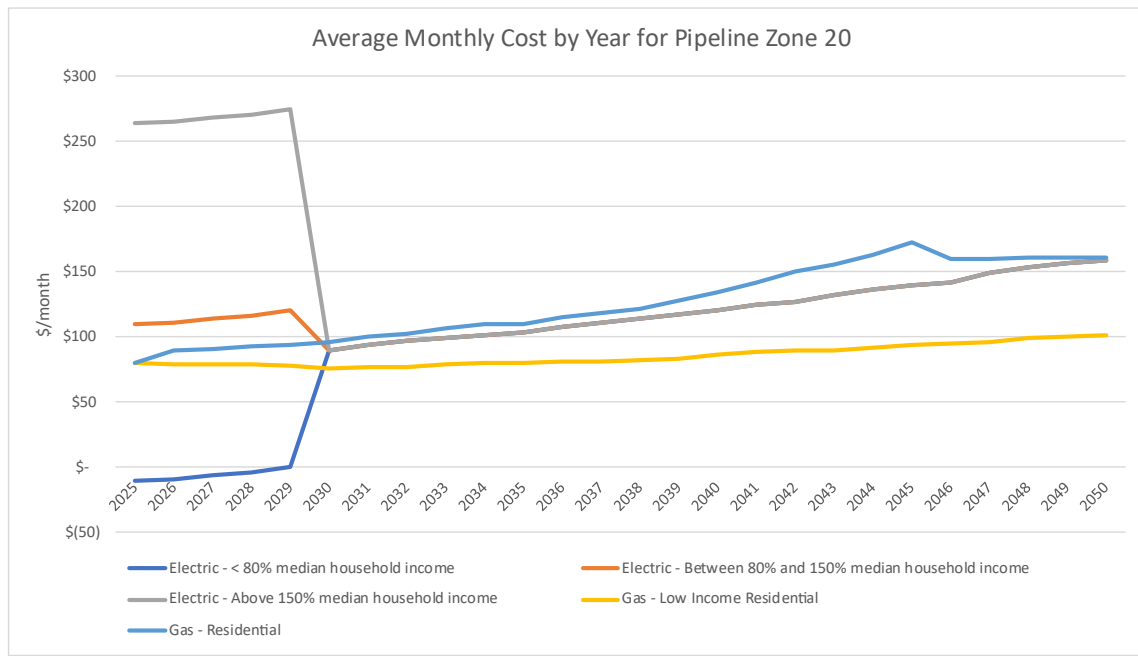
Zone ME-WA

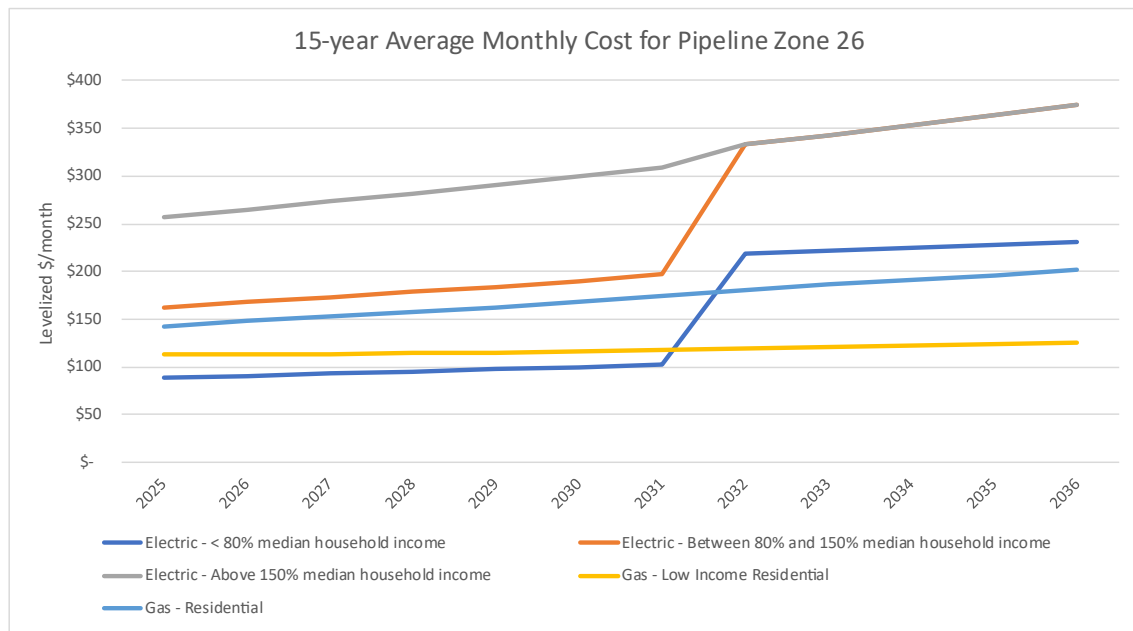
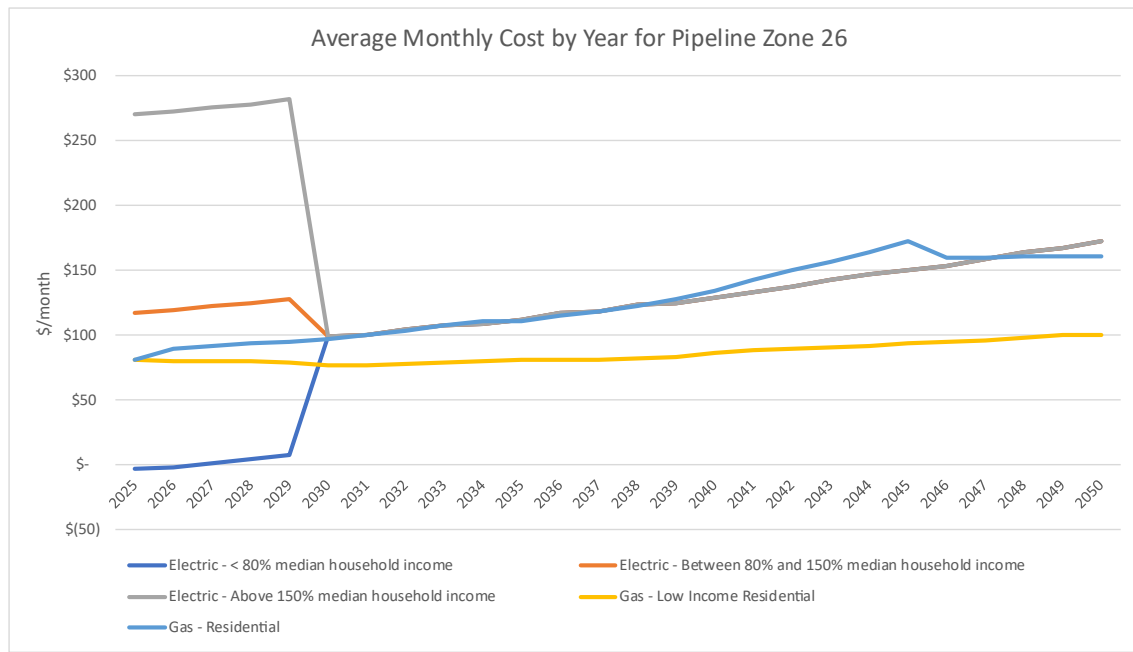
Monte Carlo Simulations - Customer Perspective (Furnace Cost Reduction Included)

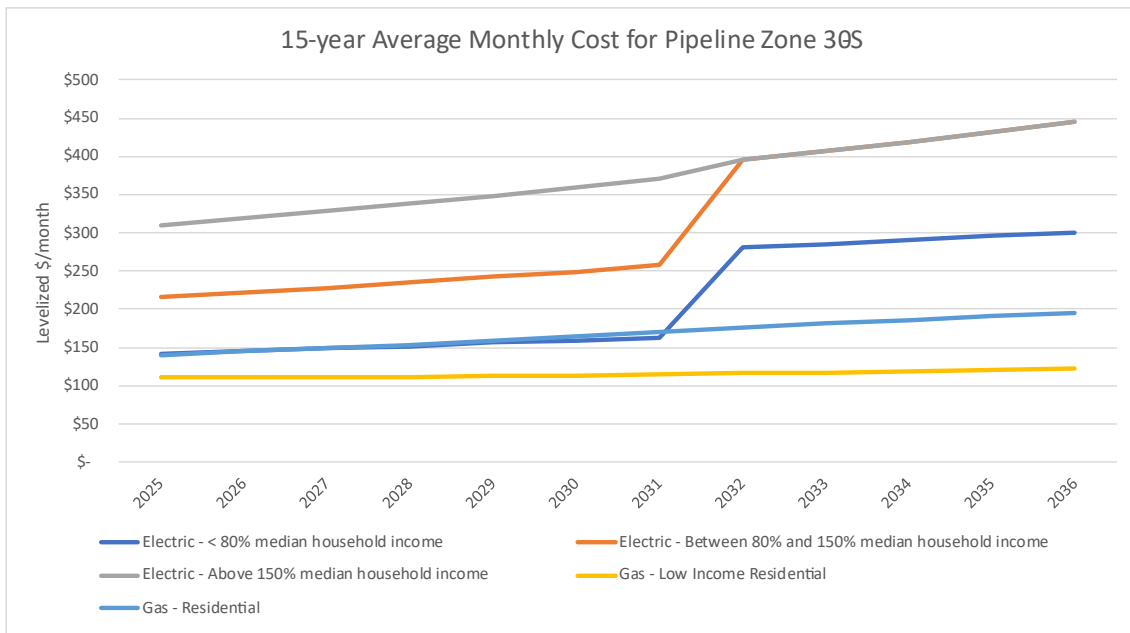
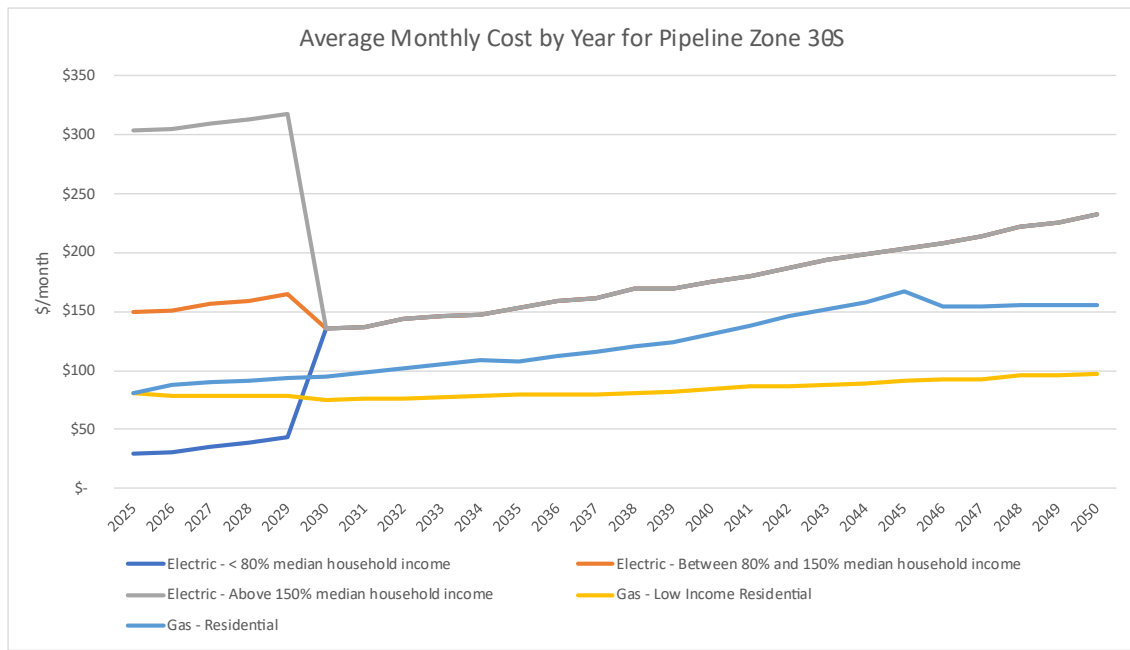
Zone 10

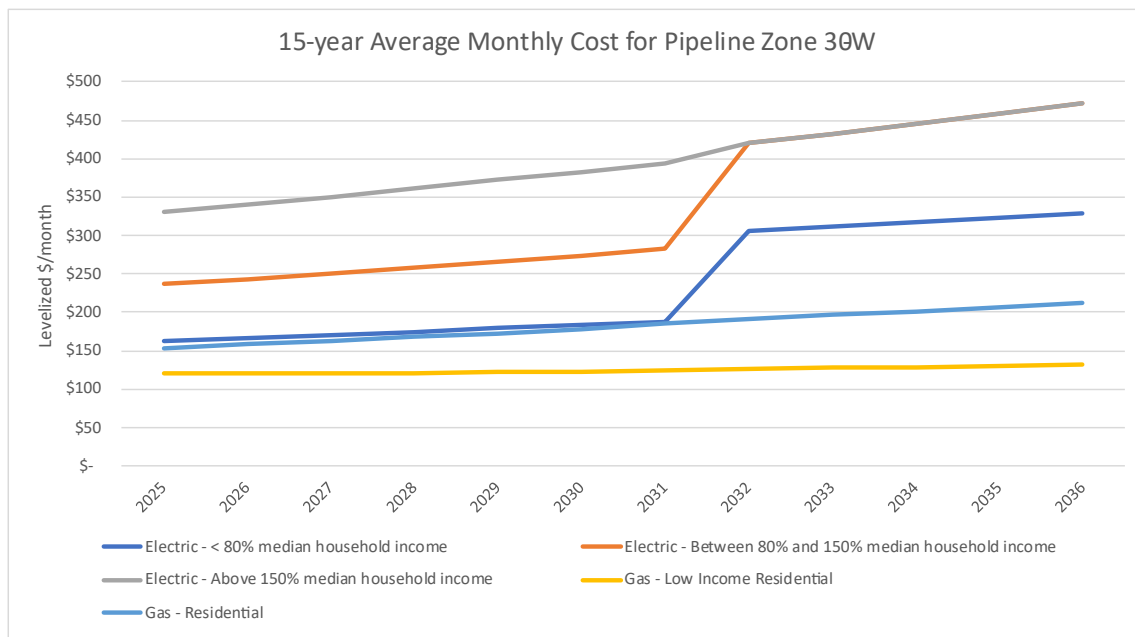
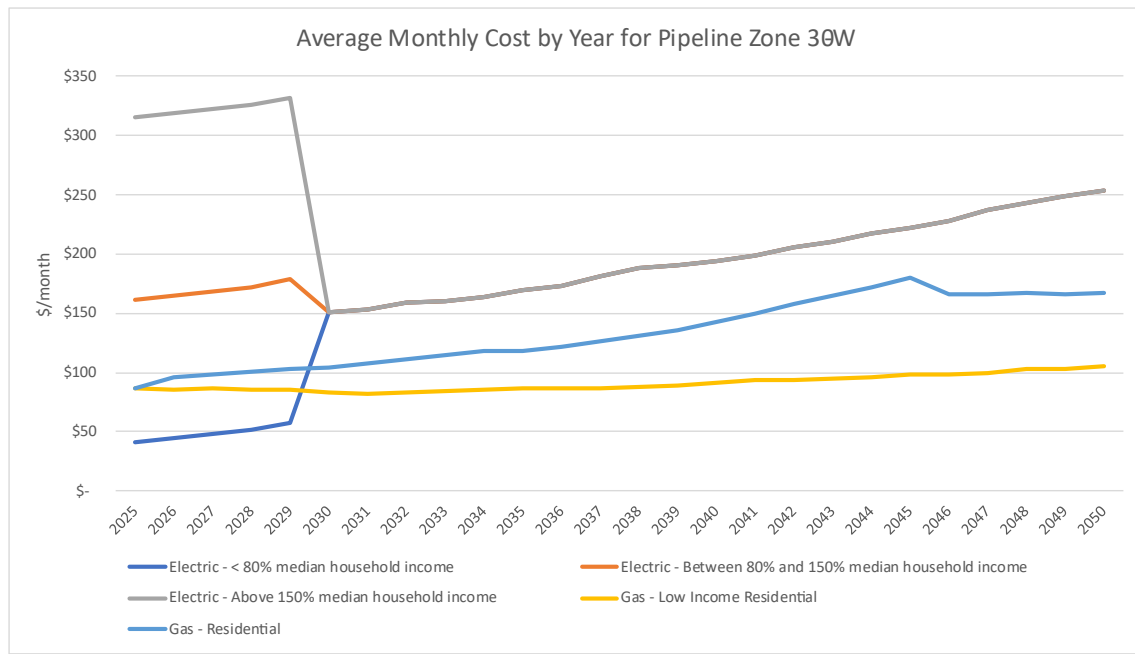


Zone 11

Zone 20

Zone 26

Zone 30-S

Zone 30-W

Zone ME-WA