Appendix F

Capacity Requirements & Peak Day Planning

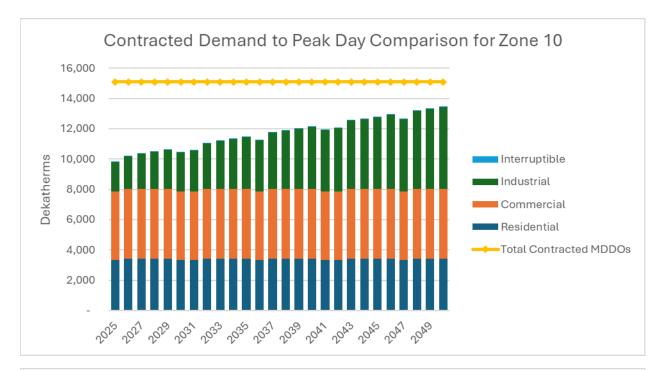
2025 WA IRP

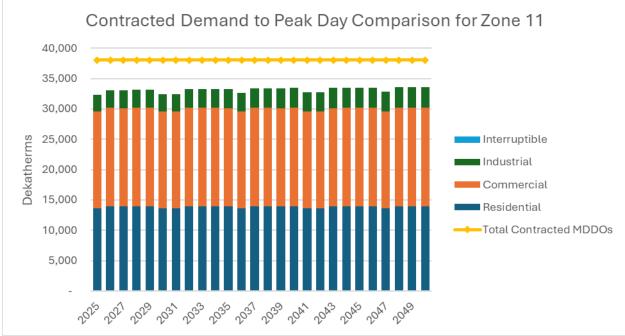
Appendix F - Introduction

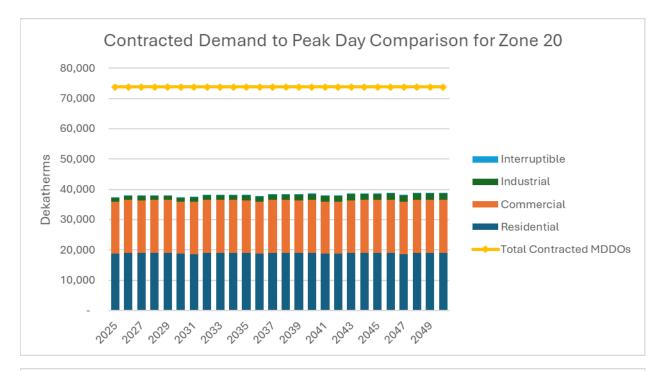
Provided in Appendix F are charts for the Reference Case and High Growth portfolios. Each portfolio is broken out by individual pipeline Zones. Each graph shows the peak day stack for core residential, commercial, industrial, and interruptible customers. Each graph also shows the contracted Maximum Daily Delivery Obligation (MDDO) for the pipeline Zones.

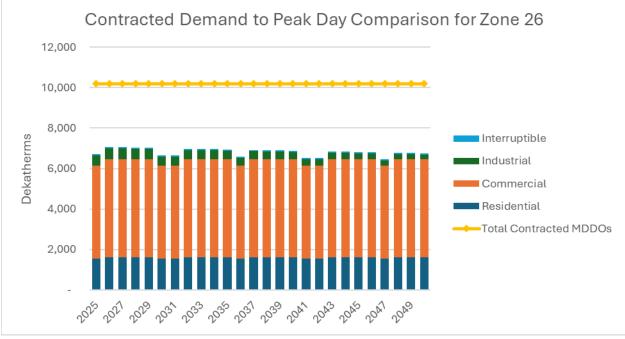
Contracted MDDOs may be Pipeline Zone (Zone) specific, or it may be capacity that can be delivered to several Zones. Cascade will explain contract 140047, as outlined in Appendix G, to show the flexibility of Cascade's upstream transportation contracts. Every contract has a receipt and delivery point. The receipt point is the location at which Cascade will receive the gas to transport on Northwest Pipeline to Cascade's customers. The delivery point is the location at which Cascade must send the gas, with caveats as explained with the contract 140047 example. This contract has receipt capacity of 46,478 dekatherms (dths) at Sumas, and 46,478 dths of delivery capacity to six different locations. Contract 140047 has multiple delivery points and can deliver 15,000 to Zone 30-W, 278 dths to Zone ME-OR, 800 dths to Zone 20, 5,000 dths to Kern River, 4,000 dths to Portland West, and 21,000 to Stanfield Delivery. Three of the contracts go directly to pipeline Zones and Cascade is contractually obligated to move the gas to those locations. The Kern River, Portland West, and Stanfield Delivery are points where Cascade does not have any customers. For Kern River and Portland West, Cascade can deliver the gas along the path from Sumas to Kern River and Sumas to Portland West. To explain Kern Rivers path further, this means Cascade can deliver the gas from Sumas to Zone 30-W, Zone 26, Zone 20, Zone 24, or Stanfield delivery. Cascade has the flexibility to move the gas to a zone one day, and a different zone the next day. Cascade can also deliver gas to multiple zones using that portion of the delivery rights as long as the total does not exceed the MDDOs. For Stanfield Delivery, this is a point where Cascade can take gas off of Northwest Pipeline and put it on Gas Transmission Northwest where it would then use a GTN contract to deliver the gas to customers off of GTN. Cascade has many contracts, some that are more or less flexible. Cascade also has contracts where the receipt rights are greater than the delivery rights, which give Cascade flexibility of where the gas is received, providing arbitrage opportunities.

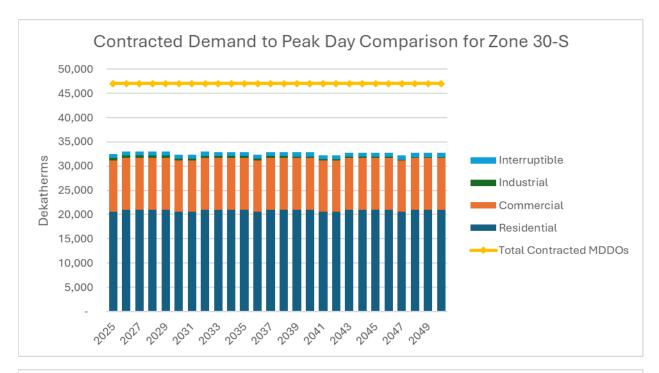
Under flat or low growth, Cascade anticipates there may be opportunities for temporary or permanently releasing capacity. Cascade must keep in mind the flexibility of these contracts when deciding which contracts to release. Under the high growth, Cascade anticipates less opportunity for capacity release. Cascade does show a need for more capacity for ME-WA in the mid-planning horizon, however, with the additional of the Attalia gate station, Cascade can now deliver contracted MDDOs off the GTN pipeline to Zone ME-WA. Cascade will also need to look at more recent data that has indicated Cascade's peak forecast may be projecting lower than actual recent events have indicated peak day should be.

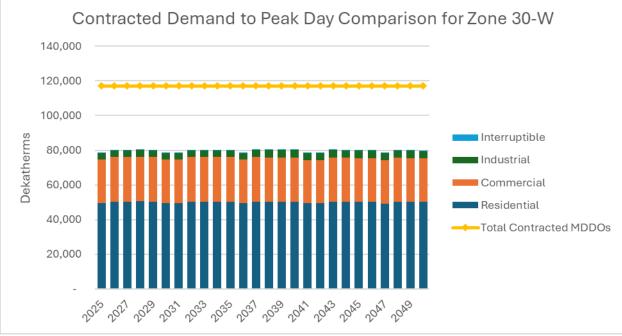


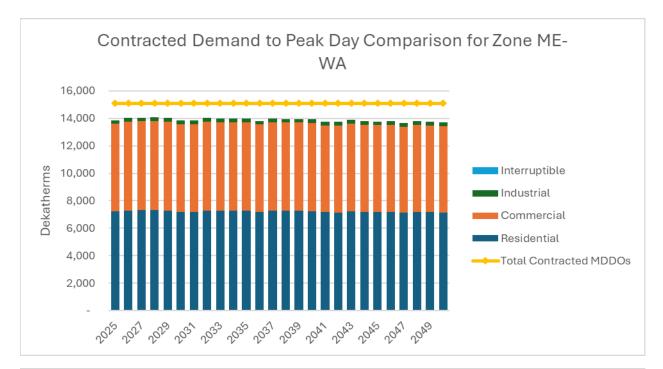


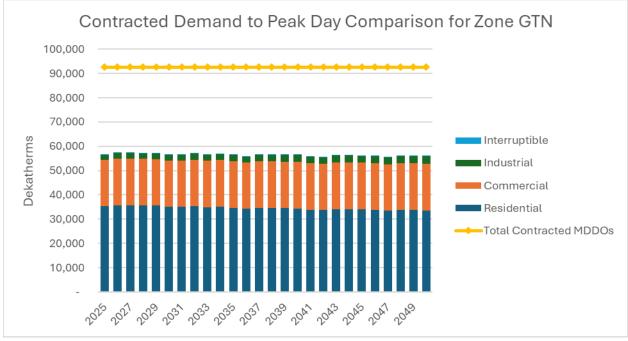


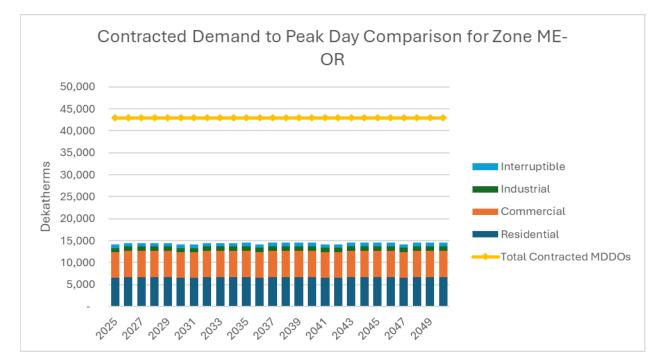


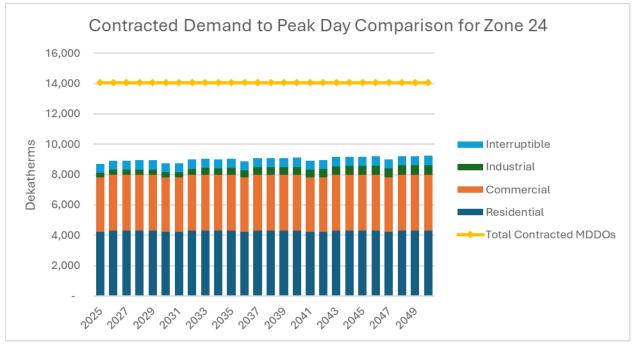


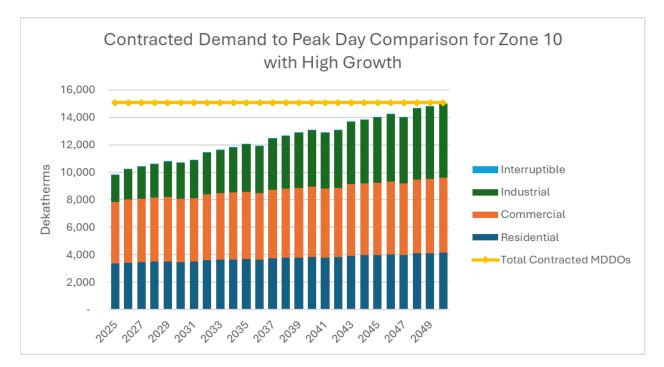


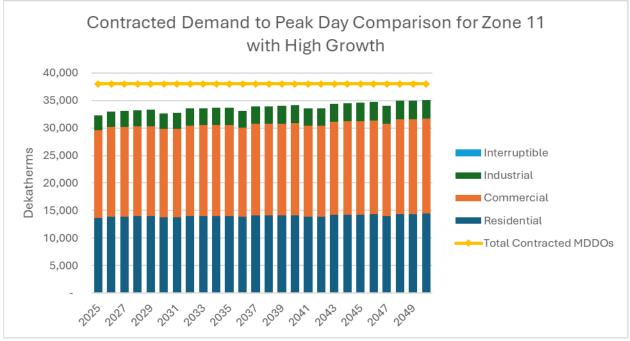


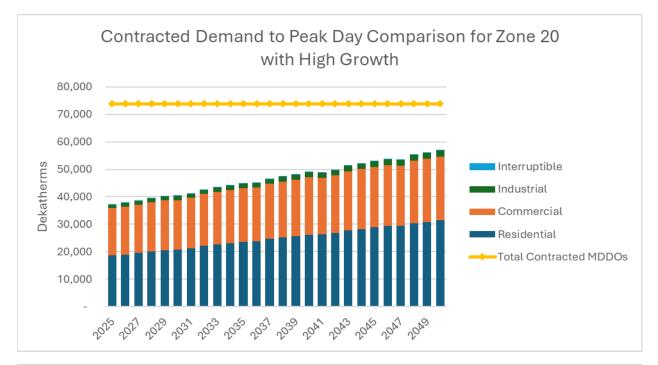


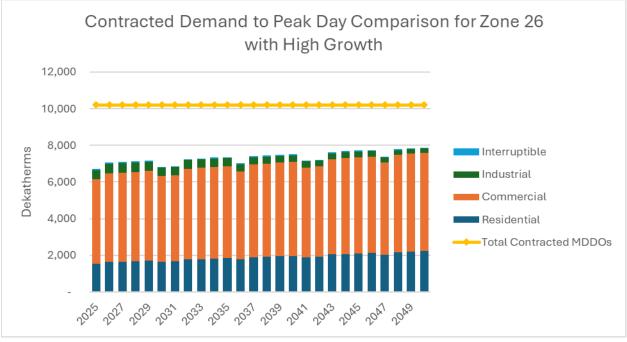












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