

## Appendix F

### Capacity Requirements & Peak Day Planning

2023 WA IRP

## Appendix F - Introduction

The purpose of this document is to illustrate the flexibility of Cascade's system, and to identify where Cascade may need to pick up incremental upstream pipeline transportation rights.

Cascade can realign the transportation Maximum Daily Delivery Obligation(s) (MDDOs) in the Company's contracts to citygates in the same pipeline zone on Northwest Pipeline (NWP) system. GTN has citygate specific MDDOs where the MDDOs cannot be realigned. However, Cascade does have contracts on GTN that can be delivered to any of the citygates, therefore those MDDOs can be realigned.

In the charts provided in Appendix F, the green bars indicate what the Company forecasts demand less DSM to be in a peak day environment over the 28-year planning horizon. The yellow line shows how many therms can contractually be moved to that area with location specific MDDOs. The blue line shows the total amount of therms that are utilized by realigning certain contracts that do not specify a fixed location and adding those MDDOs to the fixed contracts. These flexible contracts are assigned using the Company's optimization software, PLEXOS. Finally, the orange line illustrates how much demand Cascade can serve by adding incremental transportation agreements to its existing transportation portfolio. The space between the blue line and orange line, if any, shows exactly how much additional transport the Company believes will need to be acquired, and when it needs to be picked up.

As mentioned above, Cascade has the ability to realign certain MDDOs at the upstream pipeline zonal level to help serve demand in areas where there is not a direct contract to that citygate. To that end, certain citygates within NWP's system will utilize MDDOs above or below their contracted level. Some examples of this are described below:

**Citygates where Realigned MDDOs are below contracted MDDOs:** This occurs when the Company has the capacity to send more gas to a citygate than what is projected to be needed over the 28-year planning horizon. Ideally, this upstream transportation capacity is moved to another citygate within that zone, but in certain situations these MDDOs are unable to be utilized if they are not needed elsewhere. Examples include Quincy and Prosser.

**Citygates where Realigned MDDOs are above Contracted MDDOs:** This occurs when the Company projects that there is not enough upstream capacity in existing contracts to serve projected demand over the 28-year planning horizon, but there is excess capacity at a citygate within the same zone. It is important to distinguish that this is not an acquisition of additional capacity, but a realignment of excess capacity within the same zone. Examples include Kennewick Loop and East Stanwood Loop.

**Citygates where Realigned MDDOs do not meet peak day demand require incremental MDDOs.** Incremental MDDOs are incremental upstream resource that Cascade would purchase to meet a shortfall. For the 2023 WA IRP, Cascade identifies a need of incremental MDDOs for the Zone 11 citygates beginning in 2046. Since this shortfall is 23 years away, Cascade does not have immediate plans in the two-year action plan to remedy the shortfall. Rather, Cascade will monitor growth, climate commitment act impacts, new legislation, and any other causes that may impact Cascade's future demand and contracted capacity.













































































