**Introduction**

The purpose of this document is to illustrate the flexibility of Cascade’s system, and to identify where Cascade needs to pick up incremental transportation rights.

Cascade can realign some of the transportation Maximum Daily Delivery Obligation(s)(MDDOs) in the Company’s contracts to citygates in the same zone so long as the contract doesn’t specify a specific citygate where the gas needs to flow.

In the first series of charts, below, the Company compares the forecasted demand at the zonal level in the past four IRPs to the current available transportation capacity. The Company also aggregates the gates by Zone, by state, and finally the entire system. This is shown in the second series of charts which analyzes each of the citygates in Oregon and Washington. In these charts, the green bars indicate what the Company forecasts demand to be in a peak day environment for a 20 year time horizon. The gray line shows how many therms can contractually be moved to that area with location-specific MDDOs. The orange line shows the total amount of therms that are utilized by realigning certain contracts that do not specify a fixed location where the therms need to go, and adding those MDDOs to the fixed contracts. These flexible contracts are assigned using the Company’s optimization software, SENDOUT. Finally, the blue 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 on the zonal level to help serve demand in areas where there is not a direct contract to that citygate. To that end, certain citygates within Northwest Pipeline (NWP) will utilize MDDOs above or below their contracted level. Some examples of this are shown below:

-Citygates where Utilized MDDOs are below contracted MDDOs: This occurs when the Company has the capacity to send more gas to a citygate than what they project is needed over the 20 year planning horizon. Ideally, this 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: Kalama #1&2, Dehawn Dairy, Milton-Freewater.

-Citygates where Utilized MDDOs are above Contracted MDDOs: This occurs when the Company projects that there is not enough capacity in existing contracts to serve projected demand over the 20 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: 7th Day School, North Pasco, Sunnyside

-Citygates where Utilized MDDOs are both above and below contracted MDDOs: In certain situations, a citygate may start the planning horizon with excess capacity, but grow to a point where Cascade expects a shortfall with current contracts. In these circumstances the Company illustrates the citygate first sharing the excess MDDOs with other locations that need it, but later pulling capacity from other areas with excess transportation contracts. Examples include: Burbank Heights, Grandview, LDS church.























































































































































