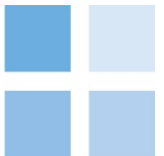


Gas Transmission Charging Review

Fourth Technical Working Group Meeting – Part 2

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A ASSUMPTIONS

Assumptions



Probability of constraint

- The expected probability of constraint is a key input in determining the expected cost of constraint which in turn influences the long-term vs. short-term booking decision.
- The model assumes a user-defined curve to determine the probability of constraint based on a net flow to net capacity ratio (flow and obligated capacity levels adjusted for existing QSEC bookings).

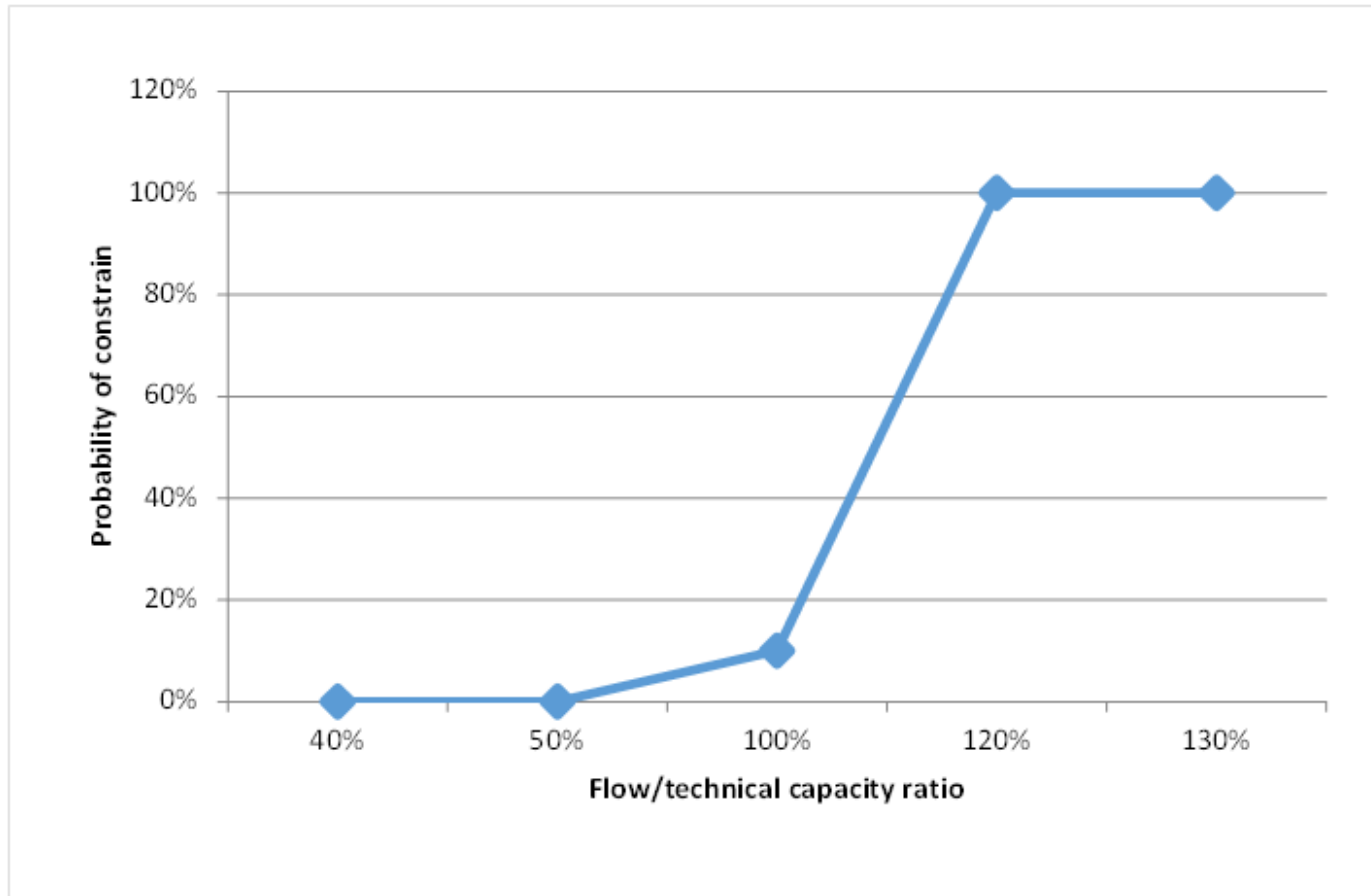
Current parameters underlying the probability curve:

- When the net flow to net capacity ratio $< 50\%$, the probability of constraint = 0;
- The probability of constraint rises gradually for a net flow to capacity ratio $> 50\%$ to reach a value of 10% when ratio = 100%;
- For a net flow/capacity ratio $> 100\%$, the probability of constraint rises faster up to a value of 100% when the net flow/capacity ratio = 120%.

Assumptions



The linear (kinked) probability of constraint curve...



... is a parameterised input in the model that can be changed by the model user

Possible modifications



While we think our approach is appropriate...

Different groups of ASEPs or sources could have different curves:

- For example, an ASEP with a single user, such as a storage facility, may never have a risk of constraint; ...or
- Certain shippers or types of supply may have a different reaction to the probability of constraint

One possible development would be to have three constraint curve options:

- One where there is never the risk of constraint;
- One 'normal' curve as the one illustrated; and
- One where a higher degree of risk aversion means that LT bookings happen at lower probabilities of constraint (this could be reflected by adjusting the rule of thumb for booking LT discussed in the next slide)

... there are other potential options to consider

Assumptions



Booking strategy rules assume a simple rule of thumb...

- The first part of the booking strategy model determines on a daily basis whether it is better to book long-term or short-term capacity products.
- But certainty of QSEC can only be acquired by buying for the entire quarter rather than an individual day.
- The model uses a simple rule of thumb to determine the booking decision:
 - Book QSEC if for more than two thirds of the days within a quarter it is preferable to book long-term;
 - QSEC is booked for the maximum forecast flow at ASEP in that quarter.

... to determine whether it is in a network user's interest to book long-term rather than short-term capacity



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