

Annex: NI Network Capacity Weighted Distance Counterfactual Comparison

A. Assumptions

1. CWD calculations have been carried out in accordance with Schedule 8 of the Network Code on Harmonised Tariff Structures for Gas.
2. Gas Year 2019/20 forecast capacities and required revenues have been used to calculate the reference tariffs.
3. The pipeline distances are based on the physical network at May 2018 with distances as documented in the NI Falcon Network Model.
4. The distance matrix is based on the shortest physical path between points in an unconstrained network (where it is possible for capacity to flow from all Entry Points to all Exit points). For the Greater Belfast and Ten Towns, the average distance to their constituent meter points has been treated as the focal point.
5. Where the Forecast Contracted Capacity for a given point is zero (Gormanston) the calculation results in an error or a negative price respectively therefore Gormanston has been removed for this counterfactual comparison.
6. The capacity commodity split is assumed to be 95%/5% for both the postalised tariff and CWD tariff calculations.
7. There are no adjustments for storage or interruptibility.
8. The revenue to be collected at entry and exit is fixed at 50%/50% respectively.
9. The calculations assume no cross-system usage.

B. Capacity Weighted Distance Calculations

TABLE 1: Distance Matrix (km)

Entry Points	Exit Points					
	Moffat	Belfast	Ten Towns	Maydown	Ballylumford	Coolkeeragh
Moffat	0.0	237.5	287.9	325.3	202.8	335.2

**TABLE 2: Forecasted Contracted Capacity
(kWh/d)**

Entry Points	Exit Points					
	Moffat	Belfast	Ten Towns	Maydown	Ballylumford	Coolkeeragh
Moffat	69,423,442	34,911,105	11,683,717	2,940,478	20,220,000	18,766,000

TABLE 3: Allowed Revenue & Split

	Allowed Revenue	Entry-Exit Split
Entry	£29,037,154.75	50%
Exit	£29,037,154.75	50%

TABLE 4: Capacity-Weighted Average Distance (km)

Entry Points	Moffat					
Weighted Average Distances	259.8					
Exit Points	Moffat	Belfast	Ten Towns	Maydown	Ballylumford	Coolkeeragh
Weighted Average Distances	0.0	237.5	287.9	325.3	202.8	335.2

TABLE 5: Weight of Costs

Entry Points	Moffat					
Weight of Cost	100%					
Exit Points	Moffat	Belfast	Ten Towns	Maydown	Ballylumford	Coolkeeragh
Weight of Cost	0%	36%	15%	4%	18%	27%

TABLE 6: Revenue per Point

Entry Points	Moffat					
Weight of Cost	£29,037,154.75					
Exit Points	Moffat	Belfast	Ten Towns	Maydown	Ballylumford	Coolkeeragh
Weight of Cost	£0.00	£10,465,721.91	£4,246,289.15	£1,207,567.47	£5,175,697.60	£7,941,878.61

TABLE 7: Annual Capacity Tariff (£ per kWh/d)

		Capacity Weighted Distance Tariffs					
Gas Year	Postalised System Tariff (Applicable to entry and exit points)	Moffat Entry Point	Belfast Exit Point	Ten Towns Exit Point	Maydown Exit Point	Ballylumford Exit Point	Coolkeeragh Exit Point
2019-20 Forecast Annual Tariff	£0.367690	£0.41826	£0.29978	£0.36344	£0.41067	£0.25597	£0.42321