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Dear Sarah

Response to draft determination: review of the Unaccounted for Gas benchmarks

AusNet welcomes the opportunity to provide this submission in response to the draft determination updating Unaccounted for Gas (**UAFG**) benchmarks and timing from calendar years to financial years. The review of the UAFG benchmarks is an important process to ensure our UAFG benchmarks remain relevant and economically efficient. If the UAFG is set too low, gas distributors may be incentivised to over invest in gas mains replacement and allocate an inefficient level of operational resources to find leaks, energy theft and correctable anomalies.

AusNet supports and agrees with the draft determination's use of the revealed cost methodology that considers the three years of settled data. With the use of this methodology, the draft determination concludes that our DTS class B UAFG benchmark for the next regulatory period should be at 4.6%. Should no additional settled data become available by the final determination, we agree with this conclusion.

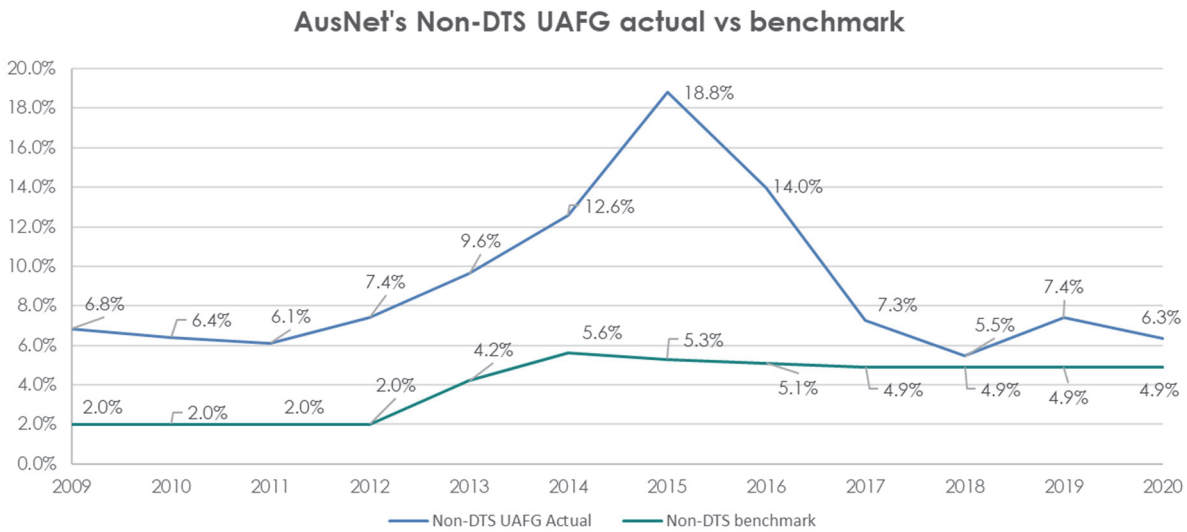
However, we do not agree with the draft determination's proposal to retain our current non-DTS UAFG benchmark of 4.9% for our networks in Horsham, Stawell and Ararat. Since the inception of the benchmark scheme for UAFG, our non-DTS network in Horsham, Stawell and Ararat has never met the proposed benchmark and is unlikely to ever meet it regardless of the investment made because of the characteristics of these networks (see Figure 1). We know this because in response to the spike experienced from 2013-15, we completed exhaustive remediation activities and put in place an efficient set of ongoing actions to ensure community safety. Specifically, we have undertaken and completed every one of the once off actions proposed in the 2018 strategy, including:

- installing town gas meters,
- replacing inaccurate custody transfer meters,
- isolating the losses in the non-DTS transmission pipeline owned by Gas Pipelines Victoria (**GPV**), and
- field audits of meters for tariff D customers.

In addition, we carried out, and continue to undertake annually, all ongoing actions embedded in the 2018 strategy. These include leak detection (and any remedial mains repair), monitoring gas pressures and reconciliation of metering data with customer data sets. The attached Appendix A contains more detail about these proactive measures.

With these persistent and proactive initiatives we had reduced non-DTS UAFG from its peak of 18% to 5.5% in 2018. We do not consider there are any further efficient measures that can be undertaken to reduce the UAFG below the proposed benchmark, which the draft determination proposes to impose for 5.5 years. We also consider it is widely accepted that good regulatory practice is to use revealed historic performance as the basis of future benchmarks. Nonetheless, we do accept that it was appropriate to remove the data associated with the leakage UAFG spike from 2013 to 2016.

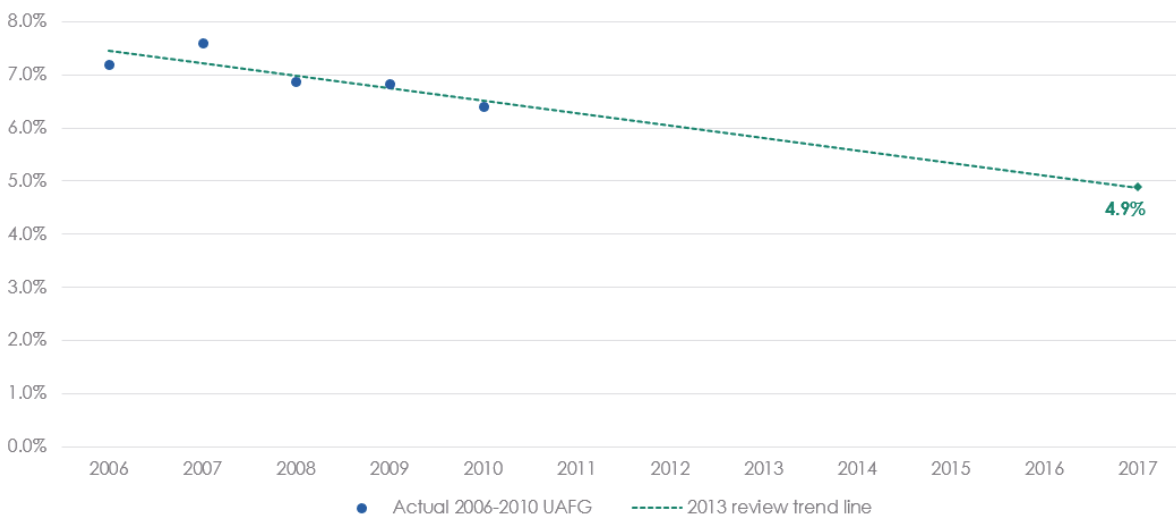
Figure 1. Non-DTS UAG actual vs. benchmark



* Note that the 2020 figure is estimate only.

It is worth reinforcing, as we did in the previous UAFG review for 2018-2022, that the current non-DTS benchmark of 4.9% had its genesis in the Commission's 2013-2017 UAFG benchmark review of 2013. The 4.9% was calculated using just five data points – the annual non-DTS UAFG outcomes between 2006 and 2010 – none of which were below 6%. That is, the Commission relied on revealed UAFG for the five years between 2006 and 2010 and drew a (linear) line of best fit through those five data points. The Commission then extended that trendline forward to the end of the 2013-2017 period it was setting benchmarks for, as demonstrated below.

Figure 2. Derivation of current non-DTS benchmark



Should the Commission persist with the 4.9% benchmark for 2023/24 – 2027/28, not only will this benchmark be based on data from 2006-2010 (that is, data from 17 years ago), but it will be based on a *trended forward* straight line of best fit from those data: a trend that was not realised, despite all of the management actions undertaken on non-DTS UAFG summarised above and detailed in Appendix A. The Commission has not presented any analysis or support for its contention that a year-on-year improvement beyond 2010 was reasonable, or even possible. Rather, it was simply based on the trend suggested by those five annual data points. AusNet considers

this approach to be manifestly inadequate for the purposes of setting benchmarks for the 2023/24 – 2027/28 period.

With all the proactive measures AusNet has undertaken, UAFG within our non-DTS networks has stabilised in the range of 5.5-7.0% which correlates with the long term trend since 2009. The majority of high UAFG in the non-DTS network is attributed to the significant presence of ageing low pressure network in the non-DTS region. These mains will be replaced over the next 5 years, but we do not expect that to bring down our UAFG to the benchmark. Alternative options of expanding the mains replacement for non-DTS network pipelines would be an inefficient outcome that would result in higher costs for our all customers, and conflicts with clear policy direction to minimise investment in response to the Gas Substitution Roadmap. Therefore, we recommend a non-DTS UAFG benchmark of no lower than 6.4%, noting the current 3-year average of settled data (2017-2019) is 6.7%.

Further comments about the change in timing from calendar years to financial years

AusNet recommends retaining the existing UAFG benchmarks timing provisions in the Gas Distribution System Code of Practice and not amending the timing as proposed in the draft determination. We would welcome having certainty of UAFG targets in advance of providing a revised gas access arrangement proposal to the AER.

If you have any further queries on this submission, please do not hesitate to contact Justin Betlehem on 03 9695 6288 or via email [REDACTED].

Yours sincerely



Tom Hallam
GM Regulation (Transmission and Gas)
AusNet Services

Appendix A: Summary of proactive measures to reduce UAFG

To summarise the following proactive measures have been undertaken in 2018-22 GAAR period to address non-DTS UAFG.

1. Proactive management with a dedicated taskforce

Additionally, during the years 2017 to 2019 we established a UAFG Taskforce that met monthly. This group was comprised of relevant managers and various subject matter experts. The taskforce reviewed UAFG performance and implemented initiatives such as leakage surveys, metering data reviews and meter accuracy validation. For each meeting we recorded an extensive list of over a hundred completed actions and documented identified issues.

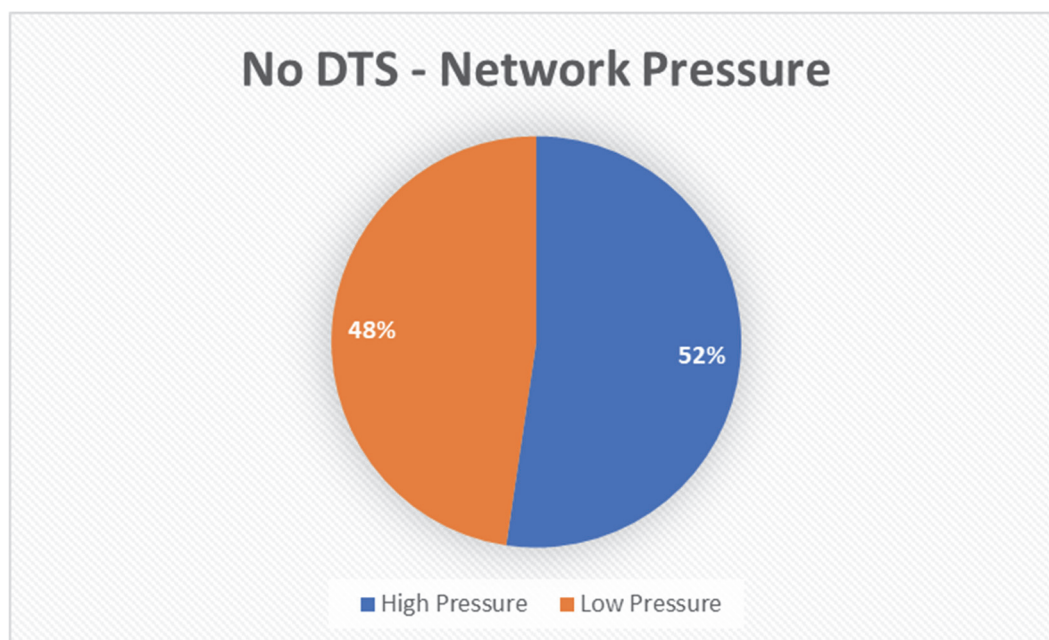
2. Leakage Surveys

AusNet undertook multiple leakage surveys of non-DTS Towns (Ararat, Stawell, Horsham) in 2018 & 2020 to address the UAFG issue. These surveys were conducted in the manner recommended by an external advisor and involved the use of gas detection above the ground over our non-DTS network and, where appropriate, pigging within pipelines. The leakage survey results reveal high and growing leakage rates in the network.

Non-DTS Network	Aprox Km	Leakage Survey (Number of Leaks)	Leakage Survey (Number of Leaks)
		2018	2020
Ararat	70.8	11	26
Stawell	60	21	45
Horsham	126.2	52	79
Total	260	84	150
Leakage Rate (Leaks/Km)		0.32	0.58

A significant portion of the network in non-DTS towns consists of low-pressure ageing pipework. The pipework consists of predominantly cast-iron, steel and older generation polyethylene (**PE**), which is prone to leaks due to corrosion and brittle fracture and is reflected in growing leakage rate trend. Given the relative higher volumes of gas in the low pressure network in our non-DTS network compared to our DTS network, we would expect that our non-DTS network will have relatively more leaks than our DTS network. However, this is not the case because the survey results indicate the leakage rate per kilometre is no higher than our DTS network. The only way to reduce

the number of leaks is to make is disproportionately large investments in mains replacement in our non-DTS network, compared to our DTS network area. That would be a non-efficient outcome that would result in higher costs for our customers, and is an approach that is in direct conflict with the clear policy direction to minimise investment in response to the Gas Substitution Roadmap.



3. Industrial and Commercial customer usage monitoring

Inaccuracies in usage measurement of industrial and commercial (**I&C**) customers has a direct correlation with steep rise in UAFG. High UAFG in years 2014 to 2016 period was a result of billing accuracies arising from I&C meters issues and incorrect Pressure Correction Factors (**PCF**) associated with few I&C customers. The issues were rectified, resulting in steep drop in UAFG during the 2016-17 period.

As a part of UAFG Taskforce initiative, usage trend was reviewed for all I&C customers in non-DTS regions to ensure there are no further anomalies. Additionally, we have a regular process in place to review and monitor any usage anomalies. Therefore, we do not expect any further reduction in non-DTS UAFG in the future as a result of usage monitoring techniques.

4. Data Quality - Pressure Correction Factor Review

AusNet reviewed the PCFs associated with all domestic and I&C customers in our non-DTS network to ensure no billing discrepancies. Furthermore, this review has been adopted as a routine practice across our gas network. A PCF review is undertaken on annual basis to eliminate any human factor issue associate with correct PCF in the system. As a result of this process change, we do not expect to achieve any further reduction in non-DTS UAFG from correcting PCF errors.

5. Installation of Town Meters

To ensure losses arising from leakage through the GPV pipeline were no longer attributed to AusNet's UAFG calculation, we installed town meters at Ararat, Stawell, and Horsham. After confirming and quantifying the issue, we reached an agreement with AEMO and Energy Australia (Retailer for the non-DTS transmission pipeline) in 2018 to settle UAFG using gas injection data from the town meters. Consequently, there will be no further reductions to our non-DTS UAFG as a result of removing UAFG that is properly attributable to the GPV pipeline.