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4 April 2014

Ms Amber Miller  
Senior Policy Officer  
Essential Services Commission of South Australia  
GPO Box 2605,  
ADELAIDE SA 5001

Dear Ms Miller

**RE: *ENVESTRA'S JURISDICTIONAL SERVICE STANDARDS FOR THE 2016-2021 REGULATORY PERIOD – ISSUES PAPER***

I refer to the Essential Services Commission of South Australia ('Commission') issues paper titled '*Envestra's jurisdictional service standards for the 2016-2021 regulatory period*', released 7 March 2014.

In this paper, the Commission is seeking advice from the Technical Regulator on whether a revised UAFG target is required for the Envestra 2016-2021 regulatory period and if the level of UAFG in Envestra's distribution system is at a safe and acceptable level.

The current Gas Distribution Code includes a UAFG target, requiring Envestra to use its best endeavours to:

- achieve a level of UAFG for its distribution system of no more than 1,626TJ by the end of the 2011-2016 regulatory period; and
- reduce the levels of UAFG in each year of the current regulatory period.

I recommend that a revised UAFG target for the 2016-2021 regulatory period should be established by the Commission and incorporated into the Gas Distribution Code.

The rationales supporting the recommendation are:

- The UAFG target (expressed by TJ value or %UAFG) is an indicator of the general conditions and performance of the gas distribution network. A high value of UAFG would indicate higher risk associated with:
  1. Pipeline failure of the aged-deteriorated cast iron mains (CI) through fracturing and unprotected steel mains (UPS) caused by corrosion.

2. The integrity and performance of the gas the distribution network will suffer as a result of increased gas outages due to, more frequent unplanned repairs, water ingress and pressure loss.
  3. The environment - with leakage of methane which is approximately 22 times worse than carbon dioxide in terms of environmental impacts.
  4. The increased maintenance costs associated with deteriorated CI & UPS mains.
- The majority (approx. 80%) of UAFG is associated with leaking of CI and UPS mains. The Office of the Technical Regulator ('OTR') and the Commission were advised that the approximately 250-350 km of the scheduled CI and UPS mains will not be replaced in the 2011-2016 regulatory period. The replacement will be re-scheduled for the 2016-21 regulatory period. Considering continued deterioration of the aged CI and UPS mains and their impact on the UAFG, the revised UAFG target and its continued monitoring is recommended for the 2016-2021 regulatory period.

	2006 - 07	2007 - 08	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012 - 13
Gas entering distribution system (TJ)	38,412	37,720	38,003	36,925	37,723	35,473	34,129
Gas delivered at high pressure to farmtaps (TJ)	9,729	9,994	10,033	9,604	9,698	8,558	8,329
Unaccounted for gas (UAFG) (TJ)	1,940	1,917	2,153	2,133	1,805	1,744	1,482
% UAFG in Envestra distribution system (exc. farmtaps)	6.76%	6.91%	7.70%	7.81%	6.44%	6.48%	5.74%
% UAFG in Envestra distribution system (incl. farmtaps)	5.05%	5.08%	5.67%	5.78%	4.78%	4.92%	4.34%
Cast iron, unprotected steel and others gas distribution pipelines replaced (km/year)	75	102	65	87	109	166	201

- As shown in the table above, by the end of 2012-13, Envestra had already achieved the UAFG target of 1,626 TJ. Envestra was required to reach the target by the end of the current regulatory period 2011-2016. However it should be noted that there was a significant and unexpected decrease of UAFG (by 328 TJ) in 2010-11. The rate of decrease of UAFG seems to be in excess of that which could be attributed to the amount of mains replacement carried out in 2010-11. Envestra and the Australian Energy Market Regulator

(AEMO), an agency responsible for the calculation of UAFG on behalf of Envestra, could not find and explain the reasons for the rate of decrease. The unexpected rate of UAFG decrease was never incorporated into the original prediction of the UAFG target for the current regulatory period and may have contributed to the earlier than expected completion of the UAFG target for that period. It is recommended that the Commission establish the UAFG target for the 2016-21 regulatory period close to or at the commencement of the period once all appropriate information regarding mains replacement and UAFG is available for the 2011-2016 regulatory period.

- As a decreasing trend in UAFG after several years of an increasing trend is a pleasing outcome for South Australia (see Table above), I believe that the UAFG level in South Australia is still relatively high (5.74% UAFG without farmtaps injections and 4.34% UAFG with farmtaps injections as of 30 June 2013) and a further UAFG reduction would be expected as the Envestra mains replacement programs will continue during the 2016-2021 regulatory period. In addition and equally important, the percentage levels are greater than the accepted UAFG benchmarks in Victoria (e.g. 3.7% for Envestra), New South Wales (approximately 2%) and Tasmania (2.5%). I suggest that the Commission, following a further consultation with Envestra, establish an UAFG target (expressed by TJ value or %UAFG) which could reduce UAFG to approximately 3-4% (without farmtaps injections) once all CI & UPS mains replacement programs are completed by the end of the 2016-2021 regulatory period.
- I noted that the Essential Services Commission of Victoria ('ESC') issued the annual UAFG benchmarks/targets for all gas distributors in Victoria, including Envestra, for the 2013-2017 period in the Gas Distribution System Code (June 2013). The UAFG annual benchmark is also included in the Tasmanian Gas Distribution Code (November 2012). I suggest that the Commission implement a similar approach by establishing the UAFG targets in South Australia for Envestra over the 2016 -2021 regulatory period so the performance of the various gas distribution networks across Australia can be compared.

If you wish to discuss any aspect of this letter, please do not hesitate to contact myself on 08 8226 5519 or Mr Andrew Szacinski, Manager, Gas Systems Regulation on 08 8226 5707.

Yours sincerely



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