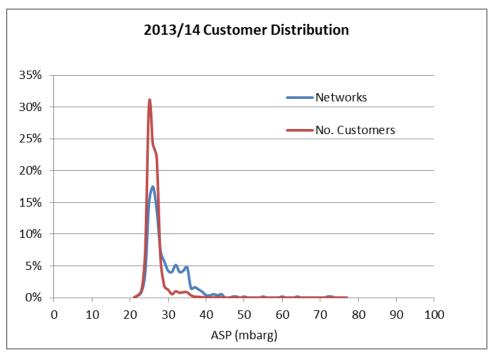
## National Grid response to the LP Service Modification Action from 19 February 2014 Shrinkage Forum

Action SF0205 19/02/14 To look at how to best provide sub-network level analysis as per the WWU analysis (including identification of negative values and an assessment of the magnitude of any potential differences), subject to GL verification of the WWU approach

National Grid proposed a methodology for improving the estimation of leakage from services on the low pressure gas distribution system. This methodology was consulted upon in February 2012 and independently assessed in April 2012. The independent assessment confirmed that the proposed methodology would "...produce a more accurate reflection of service leakage."

Application of the proposed methodology can, in some instances, lead to a negative number of services. Application of the methodology to networks in Wales & West resulted in some networks with a negative number of services in some of the service category types, which led to WWU adopting a process to eliminate these. There was concern raised that this may also be the case resulting from application of the proposed methodology to National Grid's networks. We can confirm that this is not the case and that there are no negative numbers in any of the four service categories within National Grid's networks and, therefore, there is no requirement for adjustment.

The re-baselining element of the proposed model change used the service replacement details from three years mains replacement from which to estimate the remaining population of service types; three years mains replacement represents a sample size of approximately 12%, which is sufficient to give a robust estimate. The graph below illustrates the distribution of services (number of customers) in relation to the average system pressure (ASP) at which National Grid's individual low pressure networks operate:



As can be seen, the vast majority of services are in networks operating in the 26-30mbarg ASP range. The proposed methodology doesn't bias the allocation of services towards networks operating at a particular pressure and, therefore, we believe it is unlikely that redistributing the services at a sub network level would have a significant effect on the impact of applying the model change.

In summary, we believe that the application of the original methodology is robust, and has been independently substantiate as such. In addition, as there are no instances of negative service numbers within the National Grid model, there is no requirement for any adjustment to the original methodology for National Grid's networks and there would be no benefit in adopting a sub-network allocation method.