

Overview

Background

- 1.1 Emergency costs cover the activities associated with the receipt and resolution of emergency calls.
- 1.2 Prior to 2013, both PNGL & FE reported costs and forecasts for emergencies in terms of the account headings used within their businesses
- 1.3 Since 2013 both companies have been asked to report in a common format to help introduce consistency in comparative assessment and to provide an element of comparability to GB networks.
- 1.4 Information is now reported under the following defined headings:
 - *Emergency call centre costs*: covering the handling and dispatch of emergency calls by the emergency call centre. This incorporates calls classified as enquiries by the call centre and those deemed to require further investigation.
 - *Emergency first response costs*: covering the initial investigation of an emergency job following dispatch by the emergency call centre or the company's own customer contact centre.
 - *Repair activities*: covering mains and service repair jobs raised following the initial first response investigation. This includes repairs as a consequence of third party damage where the majority of costs are subsequently recovered.
- 1.5 The emergency allowances for each company have been assessed under these headings. A summary of the outcome of the individual GDN assessments is provided in the GDN-specific sections in Chapter 6.0.
- 1.6 This Annex provides further description of this work, the approach applied and the detail behind the individual GDN assessments. It also details our response to the consultation feedback received on the draft determination (as summarised in Annex 13) and any associated adjustments to the GDN allowances.
- 1.7 All figures quoted are pre efficiency and net of contributions.

Emergency Call Centre

Call Modelling for GD17

- 1.8 For GD14, our engineering consultants Rune Associates Limited (Rune) developed a model in order to determine allowances based on appropriate call numbers and call centre costs. The allowances determined for GD14 assumed that the number of calls per customer should reduce over time. It applied the following reductions from 2015 onwards.
 - 3% per year target reduction in calls from existing customers.
 - 1% per year target reduction in calls from new customers.
- 1.9 We have followed a similar approach for assessing costs in GD17. Rune therefore developed an updated model for the purpose of assessing call volumes and costs for GD17.
- 1.10 However the introduction of new procedures by PNGL in 2014, in which some calls are routed away from the Emergency call centre, has meant that modelling for GD17 could not be undertaken on exactly the same basis

- 1.11 To account for these issues, Rune's modelling for GD17 has been undertaken on the basis of the total number of emergency calls received on any number. The model allows the number arriving at the call centre to be identified within the overall total. Some assumptions have been made in order to normalise projected call numbers against historic data within the revised model format.
- 1.12 As in GD14, the model assumes that the trend for the number of calls per 10,000 customers should reduce over time. This is based on the increasing scale of the established customer base relative to the level of new customer connections which may initially generate a higher emergency call rate. The GD17 model continues to assume a higher number of calls for new customers compared to existing customers to account for this.
- 1.13 The principles and assumptions applied in GD17 assessment are as follows:
- Call volumes for 2012, 2013 and 2014 provide the basis for the model.
 - Based on experience and the level of installation problems, calls from new customers in year are expected to be higher than from existing customers. The model assumes 1,591 calls per 10,000 existing customers and 5,140 per 10,000 new customers.
 - 3% per year target reduction in calls from existing customers from 2018, resulting in 1,367 calls per 10,000 customers in 2022.
 - 1% per year target reduction in calls from new customers from 2018, resulting in 4,888 calls per 10,000 customers in 2022.
 - Forecast call numbers are derived from the forecast number of customers.
 - Fixed costs and unit rates from the contract with National Grid have been used to estimate the costs from the modelled call numbers for the call centre.
- 1.14 The target reduction percentages and the approach to the timing of their application have been carried forward from GD14. Commencing target reductions in the second year of the price control provides time for the companies to identify and implement changes necessary to meet the target reductions applied.
- 1.15 The calls per 10,000 customer figures have changed slightly since the draft determination. This is a consequence of an adjustment of model assumptions for missing data to ensure FE's total call numbers are more reflective of historic and projected trends. The impact of the change on the assessed allowances is minimal.

Emergency Call Centre Contract

- 1.16 PNGL and FE both contract emergency call handling services to National Grid. National Grid is an experienced service provider which delivers the gas emergency service for the whole of GB. The scale of its operation also provides opportunities to accommodate a rapid increase in the number of calls during incidents on a "best endeavours basis".
- 1.17 The contracts established with National Grid run until 2019 and were originally based on a fixed management fee covering around one third of the costs. The remainder was based on the number of calls received.
- 1.18 In GD14 we determined that the overall costs of the service appeared relatively high. We highlighted the potential for PNGL and FE to consider other delivery models which might result in lower costs. Recommendations included taking a collaborative approach to procurement of services and considering the potential for establishing a local emergency contact centre. Whilst there are indications that the viability of alternative models have been considered individually, there is no evidence of significant collaboration since GD14.

- 1.19 In 2014 PNGL implemented procedural changes which allowed it to reroute a significant proportion of its non-emergency meter calls away from National Grid. This helped reduce the overall combined cost of the emergency call centre services by almost 22% compared to the total GD14 allowance. This addressed many of our previous concerns in relation to the overall cost of the service and we acknowledge and welcome the work undertaken by PNGL in this regard.
- 1.20 The changes however reduced revenue below the level required for National Grid to provide a secure 24/7 service. This led National Grid to propose revised contract arrangements which are almost entirely based on a fixed management fee up to a call threshold. The combined fee covers the minimum cost required for providing a secure service to both companies. A variable cost element has also been retained to allow National Grid to bring in additional resources when call volumes exceed the threshold during periods of high demand.
- 1.21 The revised contract came into effect in January 2016 for PNGL and has subsequently come into effect for FE. The final determination assessment assumes that the fees and rates defined in the new contracts will continue to apply during GD17.
- 1.22 We recognise the importance of the maintenance of a viable and secure 24/7 emergency contact service for gas customers in Northern Ireland. The revised delivery model provides this and the minimum number of operators on which the management fee is based appears reasonable.
- 1.23 However the ability of either company to reduce costs within a combined call volume which exceeds the minimum cost recovery requirement is more limited than under previous arrangements and the need for the contract renegotiation is not clear. Based on the combined call volumes submitted for GD17, we estimate that the revenue generated through the original contracts would have exceeded National Grid's minimum cost recovery requirement from 2016 onwards. If SGN also use this service, the inclusion of its customers would increase this headroom further.
- 1.24 This interaction with National Grid provides a clear example of how the more collaborative approach recommended in GD14 might have helped to inform the negotiations and could have potentially resulted in a different outcome.
- 1.25 We would therefore again reiterate the need for the companies to continue to look at the options for procuring emergency call handling services in a collaborative manner, particularly with SGN entering the market.
- 1.26 In doing so we expect the companies to be able to clearly demonstrate in the future that they have taken a collaborative approach and that the arrangements adopted deliver the best outcome for Northern Ireland consumers on an ongoing basis. Opportunities for cross utility collaboration could also form part of this process.

Emergency First Response

- 1.27 Modelled call numbers have also been used to assess the level of emergency jobs for the first response assessment.
- 1.28 The GD17 assessment assumes that the proportion of calls in each category will remain the same as in the company submission and that the target reduction applied to emergency call numbers will therefore reduce the number of calls that result in a job.
- 1.29 Emergency job numbers have been aligned with the modelled call numbers on this basis. Unit rates have then been applied to determine an appropriate allowance for GD17.

- 1.30 The general approach adopted for assessing emergency first response costs for the final determination remains the same as that used for the draft determination.

FE Emergency Costs

Overview

- 1.32 FE requested a total allowance of £1.35m in 2017 rising to £1.97m in 2022, to cover the cost of the emergency call centre, emergency first response and repairs. Although we note that this included £2.13m over the period which was incorrectly allocated and has subsequently been removed or reallocated. For comparison, historical actual costs for 2013-2015 averaged around £0.69m.
- 1.33 Table 1 summarises the emergency costs submitted by FE under each emergency expenditure category.

	2017	2018	2019	2020	2021	2022	GD17 Total
Call centre (£k)	399	414	405	421	441	462	2,543
First response (£k)	895	990	1,089	1,195	1,315	1,438	6,922
Repair activities (£k)	53	56	59	62	66	69	366
Total (£k)	1,347	1,460	1,554	1,679	1,822	1,969	9,830

Table 1 - Emergency costs submitted by FE

- 1.34 Table 2 summarises the emergency costs submitted by FE under each emergency expenditure category following budget removal due to incorrect allocation.

	2017	2018	2019	2020	2021	2022	GD17 Total
Call centre (£k)	204	217	231	245	262	278	1,436
First response (£k)	767	846	929	1017	1116	1218	5,894
Repair activities (£k)	53	56	59	62	66	69	366
Total (£k)	1,024	1,119	1,219	1,324	1,444	1,566	7,696

Table 2 - Emergency costs submitted by FE net of incorrectly allocated budget

- 1.35 Table 3 summarises the final determination allowances for FE under each emergency expenditure category.

	2017	2018	2019	2020	2021	2022	GD17 Total
Call centre (£k)	201	210	220	229	239	249	1,347
First response (£k)	695	757	821	887	954	1,020	5,134
Repair activities (£k)	53	56	59	62	66	69	366
Total (£k)	949	1,023	1,100	1,178	1,259	1,338	6,847

Table 3 - Emergency costs allowed in the final determination for FE

- 1.36 Figure 1 shows FE's GD17 allowances against the submission, historical actuals and the allowances for GD14. The actual outturn cost for 2015 has been added for the final determination to show that the assessed allowances remain consistent with the company's most recent expenditure.

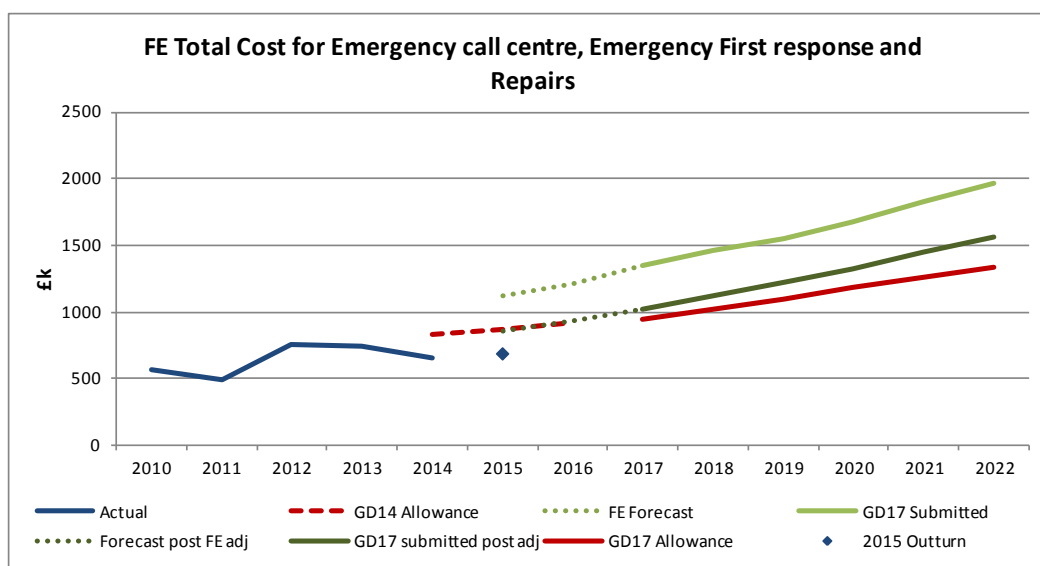


Figure 1 - FE Total cost for emergency activities

- 1.37 The key changes from the draft determination have been:
- Adjustment of model assumptions for FE to ensure that the profile of total call numbers is more reflective of historic and projected trends.
 - Revision of projected connection numbers to align with those used elsewhere in the final determination.
 - Inclusion of additional fixed costs for emergency first response services.
- 1.38 The combined effect of these changes has been to increase FE's allowance by £396k since the draft determination.
- 1.39 The key factors influencing the final determined emergency and repair allowances are:
- Removal of £1.11m of professional and legal fees from emergency call centre costs.
 - Use of call volume modelling to assess the cost for the call centre. The approach carries forward call reduction targets applied in GD14 and results in an additional reduction of £89k in the emergency call centre allowance.
 - Reallocation of £1.03m of meter replacement costs included in emergency first response operating expenditure to domestic meter capital expenditure.
 - Adjustment of the number of estimated emergency jobs to align with modelled call numbers when assessing emergency first response costs. In addition a lower unit rate of £5 was applied to jobs closed without a visit. The combined effect results in an additional reduction of £760k in the first response allowance.
 - As in GD14, and given that all the GDNs have licence obligations about operating a single emergency number in NI, we are asking that the GDNs work more closely together in procuring an emergency call centre contract to ensure that costs are as low as possible.
- 1.40 In its consultation response, FE stated that it had requested but not received the Utility Regulator's modelling of emergency calls. It also indicated that the emergency cost disallowances were of particular concern and requested further engagement with the Utility Regulator in this regard.

- 1.41 In response to this request we met FE in July to explain the modelling and approach used for assessing call numbers and the allowances for emergency costs. At this meeting we explained why we considered the approach to be reasonable and any changes likely to be adopted for the final determination and their potential impact. We also pointed out that the model had been issued to FE in a query response in April in advance of it issuing its consultation response in May.
- 1.42 FE's consultation response also stated that it believed that the call number modelling provided an artificially low basis for deriving the Utility Regulator's assumptions as it was based on below average temperature for the winter for years 2012, 2013 and 2014, quoting average temperatures for the year of 9.17°C for 2012, 9.61°C for 2013 and 10.09°C for 2014.
- 1.43 We have considered FE's comments but have not made any adjustments in this regard for the following reasons:
- Regional climate information on the Met Office web site states that the mean annual temperature at low altitudes in Northern Ireland varies from about 8.5°C to 10.0°C decreasing by approximately 0.5°C per 100m elevation. Given the range quoted and the sensitivity to elevation we judge that 2012-14 data lies broadly within the 'normal' range.
 - The allowances are intended to be for an average year and while costs in any year may be higher or lower, we would expect this to balance out over the price control period.
 - We note that call centre contract allows for a 15% increase above base level call volumes across the year before any additional costs are incurred. This helps mitigate against any potential call centre cost increases associated with an increase in activity.

FE Call Centre Allowance

- 1.44 Calls to the emergency call centre comprise of emergency reports that require investigation by a first call operative (FCO) and calls categorised as general enquiries which require no further action.
- 1.45 National Grid delivers the emergency call handling services for FE under contract as described earlier in this Annex.
- 1.46 FE has requested an annual allowance of £399k in 2017 rising to £462k in 2022 for the handling of emergency calls.
- 1.47 Figure 2 compares actual expenditure and GD17 projections to the allowances determined from the GD14 model. This shows that FE's submitted costs are higher. They also increase more rapidly than the GD14 model profile over the GD17 period.

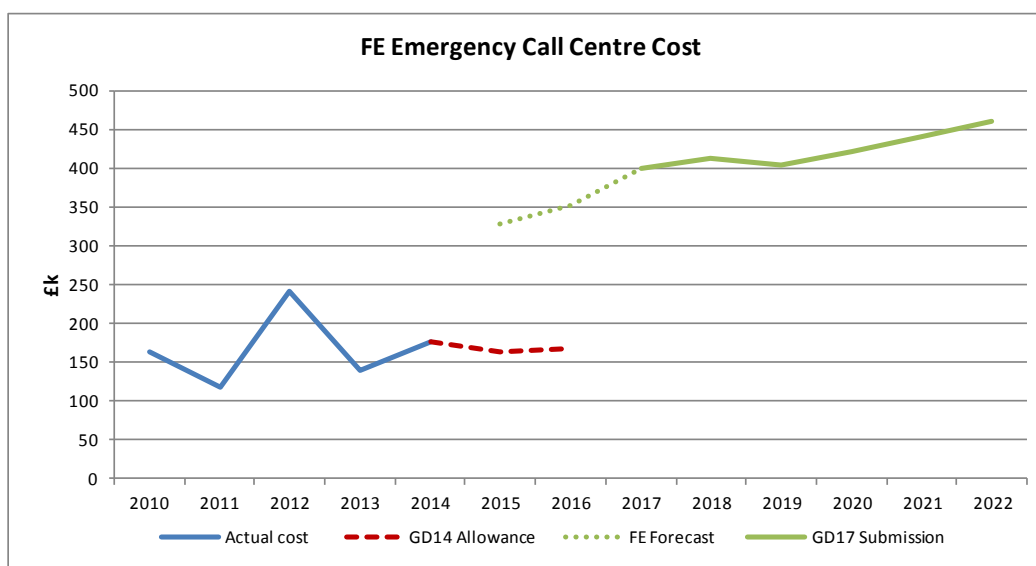


Figure 2 - FE Emergency call centre cost submission

- 1.48 The stepped increase evident in FE costs in 2015 results from the inclusion of professional and legal fees from this point onwards. This expenditure represents over 40% of the company's submitted costs on average.
- 1.49 We can see no justification for the inclusion of professional and legal fees against this activity. We have therefore excluded them from the allowance. This reduces FE's allowance by £1.11m over the GD17 period.
- 1.50 The level of professional and legal fees in FE's GD17 submission has increased generally when compared to GD14. We do not believe that the scale of this increase is justified and our treatment of this allocation across each cost category of the submission is explained in more detail in chapter 6.
- 1.51 Figure 3 shows that the submitted costs move closer to the GD14 assessment in 2015 when professional and legal fees are excluded. However they still rise more rapidly during GD17 than the GD14 profile suggested.

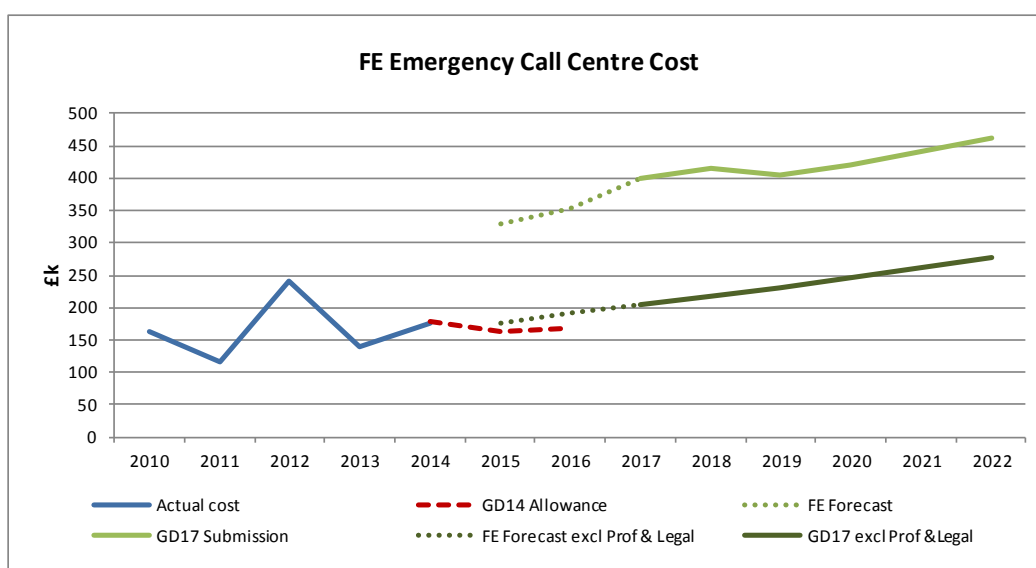


Figure 3 - FE Emergency call centre cost submission following professional and legal fee deduction

- 1.52 In the PNGL and call centre contract sections in this Annex we explain how operational changes introduced by PNGL in 2014 reduced the number of calls going to the emergency call centre significantly.
- 1.53 This led to National Grid renegotiating its contracts on the basis of a fixed management fee.
- 1.54 The move to this type of pricing model effectively establishes a lower limit of costs for this service. The opportunity to reduce costs is therefore restricted to the number of calls that exceed the threshold defined in the contract in any given year.
- 1.55 We expect FE to continue to consider how it can best manage call handling arrangements in order to minimise the number of calls that exceed the contract threshold. This should include engagement with PNGL to assess any opportunities for shared learning with regard to changes in operational practice. We reiterated this when we met with the company to discuss our approach to the assessment in advance of the final determination.
- 1.56 The assessment of FE's GD17 allowance for the final determination is based on call numbers from the updated call centre model described earlier in this Annex. The modelled numbers include for a target reduction of 3% per year for calls from existing customers and 1% for calls from new customers from 2018. Commencing target reductions in the second year of the price control provides time for the company to identify and implement changes necessary to meet the target reductions applied.
- 1.57 In its consultation response, FE raised concerns over the change to the assumed mix of calls emanating from existing customers as compared to those emanating from new customers. It stated that it believed the change in mix was not commensurate with FE's network profile and customer behaviour and asked the Utility Regulator to revisit its proposals and reinstate the GD14 model assumptions for the number of calls per 10,000 connections.
- 1.58 We have considered FE's request for us to revert to the GD14 assumptions for calls per 10,000 connection but do not believe that this would be appropriate for the following reasons:
- The GD14 assessment was based on 2010, 2011 and 2012 data. During this period the relative proportion of new connections to existing connections was higher than it will be in GD17. This is particularly the case for FE where this was in the order of 30% in the 2010-12 period compared to projections of around 10% in GD17. The use of outputs based on 2012-14 data is therefore more reflective of the customer mix in the GD17 period and the increasing familiarity of the growing proportion of existing customers with their gas installations. The type of movement in the model output data evident since GD14 would be expected as a consequence of such changes starting to take effect.
 - The application of the 'calls per 10,000 connection' figures generated by the model to the actual connection numbers generates the total number of calls estimated for each company in the modelled years. The model outputs should therefore reflect actual customer behaviour within each supply area.
- 1.59 We have therefore retained the approach adopted in the draft determination for the final determination. Adjustments to assumptions applied to FE's total call numbers have however changed the model outputs slightly and resulted in a modest increase in the allowance.
- 1.60 For the final determination we have also revised projected connection numbers to align with those used elsewhere in the final determination. This has increased the

projected number of calls in the GD17 period and the associated call centre allowances.

- 1.61 The model however still predicts lower call volumes than FE throughout the period. Whilst it indicates that call volumes will increase over the GD17 period they do so less rapidly than the figures submitted by FE and from a slightly lower base.
- 1.62 We previously explained why we believe that PNGL and FE should adopt a more collaborative approach to the procurement of call handling services for NI. Notwithstanding these comments, we recognise that the renegotiated National Grid contract represents an acceptable delivery model. We have therefore taken contract rates and applied these to modelled call numbers to assess an appropriate allowance for GD17.
- 1.63 Comparison of the modelled allowance to the contract costs submitted by FE following the removal of professional and legal fees, shows that FE's figures are around £89k higher over the GD17 period. The allowance has therefore been reduced by this amount.
- 1.64 Table 4 shows the reduction in the submitted figures resulting from the deduction of professional and legal fees as well as the final allowance following adjustment for modelled call numbers. The overall allowance is £52k higher than in the draft determination, primarily as a consequence of the increase in projected connection numbers.

	2017	2018	2019	2020	2021	2022	GD17 Total
Submission (£k)	399.2	414.0	405.3	421.4	441.2	461.5	2,542.6
Submission following Professional & Legal Fee deduction (£k)	203.8	216.9	230.6	245.1	261.5	278.1	1,436.1
Allowance (£k)	200.9	210.0	219.5	229.1	239.1	248.6	1,347.3

Table 4 - FE Emergency call centre allowance, £k

- 1.65 Figure 4 shows the GD17 allowance relative to historic expenditure, the allowance determined in GD14 and submitted costs. The GD17 allowance largely extends the challenge applied to FE in GD14. The 'step' change in the determined allowances between 2016 and 2017 results from the higher fixed costs associated with the revised contract arrangements being implemented by National Grid. The actual outturn cost for 2015 has been added to show that assessed allowances remain consistent with the company's most recent expenditure.

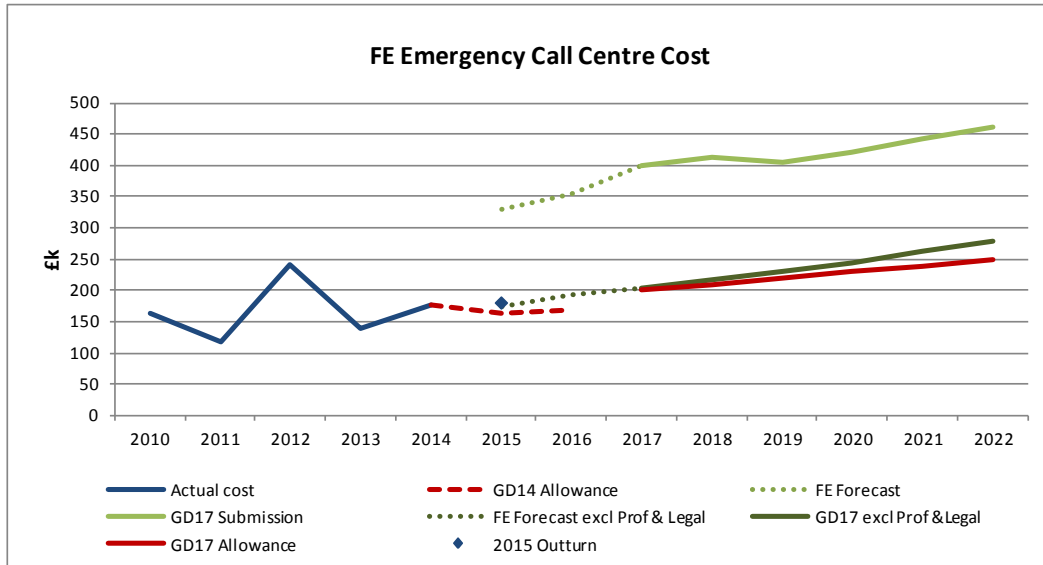


Figure 4 - FE Emergency call centre allowance

FE Emergency First Response Allowance

- 1.66 Figure 5 compares actual expenditure and GD17 expenditure projections to the allowances determined in GD14 for emergency first response costs. This shows that FE's projected costs lie above the cost challenge applied. They also increase at a higher rate than previously determined.

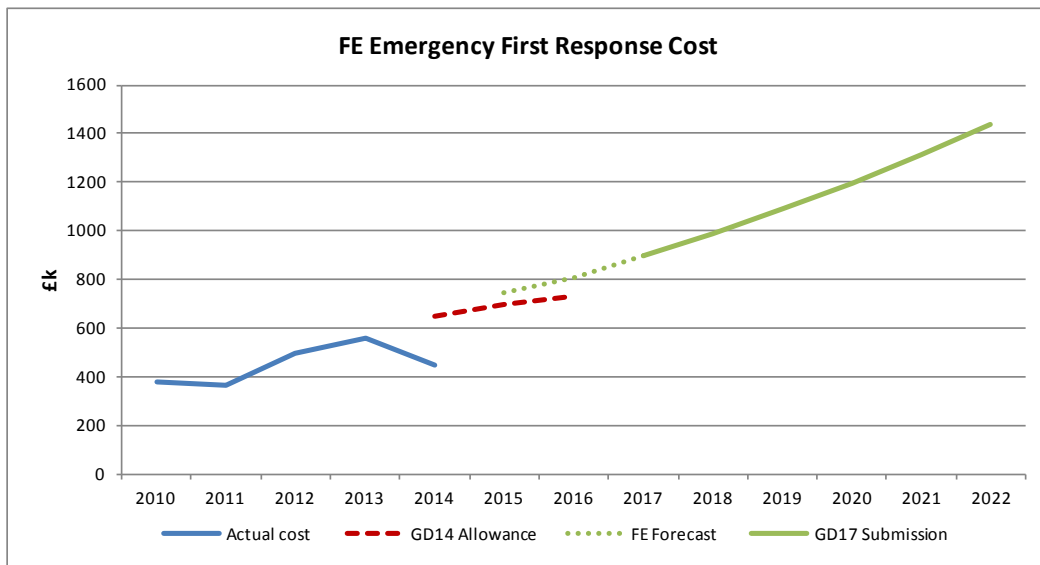


Figure 5 - FE Emergency first response cost submission

- 1.67 Checks on FE's submitted costs show that they include costs for replacement of meters which are not yet life expired, but are replaced as part of the job. These costs should have been allocated to capex.
- 1.68 We have used FE's assumptions on the percentage of meter/meter installation jobs which result in a replacement and the unit cost quoted by the company to calculate the embedded meter replacement costs. We estimate that this equates to £1.03m over the GD17 period and have reallocated this amount to domestic meter capex.
- 1.69 Although costs fall as a result of this reallocation, the relative position to the GD14 assessment remains the same, as shown in Figure 6. This is because historic costs also included this expenditure.

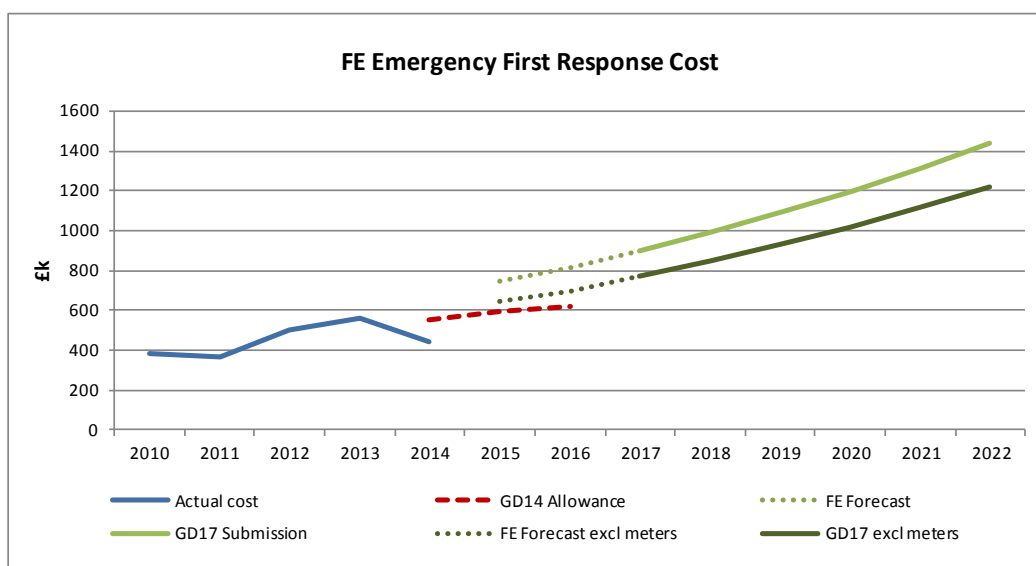


Figure 6 - FE Emergency first response cost submission following meter cost reallocation to capex

- 1.70 FE contracts first call response services to external contractors. Fixed costs represent a higher proportion of overall costs for FE and this contributes to a relatively high cost per emergency.
- 1.71 The variable cost unit rate for emergency jobs quoted by FE is also much higher than that quoted by PNGL. We recognise that FE has to operate two separate operational areas for responding to emergencies, due to the nature of its distribution area and the rapid response times defined in its standards of performance. This explains, at least in part, why the variable cost unit rate might be higher than for PNGL who operate a single, more compact, response area.
- 1.72 For the final determination we have accepted FE's explanation for the unit cost differential for jobs requiring a visit and applied it in the assessment.
- 1.73 Information provided by FE indicates that it applied the same unit rate to all jobs when estimating costs for its submission. This includes jobs closed by telephone without a visit. We do not consider this to be appropriate and would expect a much lower rate to be applied to this type of job.
- 1.74 In assessing FE's allowance for GD17, we therefore applied a unit rate comparable to the emergency call centre enquiry rate to jobs closed without a visit. This aligns with the approach adopted by PNGL. Since the draft determination we have explained the rationale for the application of this adjustment to FE and checked that the average unit rate applied by the company did not allow for these lower cost jobs.
- 1.75 In addition to the unit rate adjustment for jobs closed by telephone, we have reassessed FE's submitted contractor costs on the basis of the target reduction in call volumes from the call centre model. We have assumed that the proportions of calls in each category remain the same as the company's submission and that the target reduction therefore reduces the number of calls that result in a job.
- 1.76 In its consultation response, FE asked the Utility Regulator to "review the scale of disallowance" for emergency first response costs. FE quoted standards of service and performance response times, low call numbers and network sparsity as factors which limited its scope for planning a more efficient programme.
- 1.77 We have reviewed the fixed cost element of providing this service for the final determination and as a result of clarification received from FE have allowed additional costs for cover provided to large meter rigs and pressure reduction stations

and for enhanced cover over the winter months. All fixed costs identified by FE are now included in the final determination allowance and so we believe this is now fully reflective of its fixed cost for maintaining 24 hour emergency first response cover.

- 1.78 Final determination reductions therefore now entirely relate to the variable cost element of the service. They reflect the number of jobs estimated from the call centre modelling and the application of a lower unit cost for jobs closed by telephone, which we still consider to be appropriate. Company unit rates have been applied to all other jobs.
- 1.79 The scale of the first response disallowance has reduced by £345k since the draft determination as a consequence of the inclusion of the additional fixed costs and the increase in projected connection numbers. However the determined allowance remains £760k lower than that submitted by FE after meter replacement cost reallocation.
- 1.80 Table 5 shows the reduction in the submitted figures resulting from the reallocation of meter replacement costs as well as the final allowance following the adjustment for reduced job numbers estimated from the call modelling.

	2017	2018	2019	2020	2021	2022	GD17 Total
Submission (£k)	894.7	989.6	1,089.2	1,195.3	1,315.1	1,437.7	6,921.6
Submission following meter replacement reallocation (£k)	767.1	845.9	928.9	1,016.8	1,116.5	1,218.3	5,893.6
Allowance (£k)	694.9	756.6	821.4	886.9	954.4	1,019.7	5,133.9

Table 5 - FE Emergency first response allowance, £k

- 1.81 Figure 7 shows the GD17 allowance relative to historic expenditure, the allowance determined in GD14 and submitted costs. The GD17 allowance effectively extends the challenge applied to FE in GD14. The actual outturn cost for 2015 has been added to show that assessed allowances remain consistent with the company's most recent expenditure.

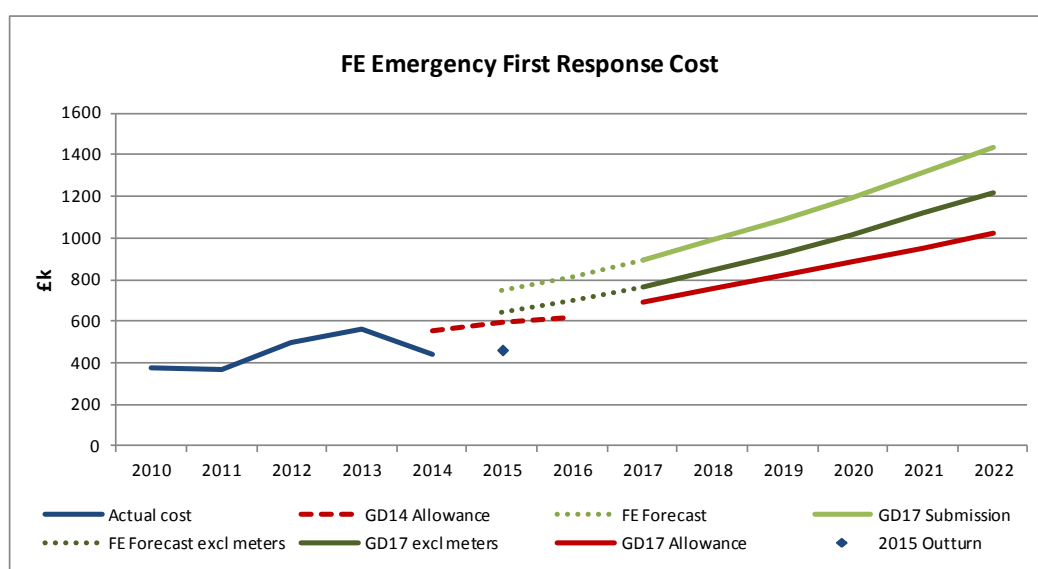


Figure 7 - FE Emergency first response allowance

- 1.82 Figure 8 demonstrates the challenge when expressed in terms of cost per connection.

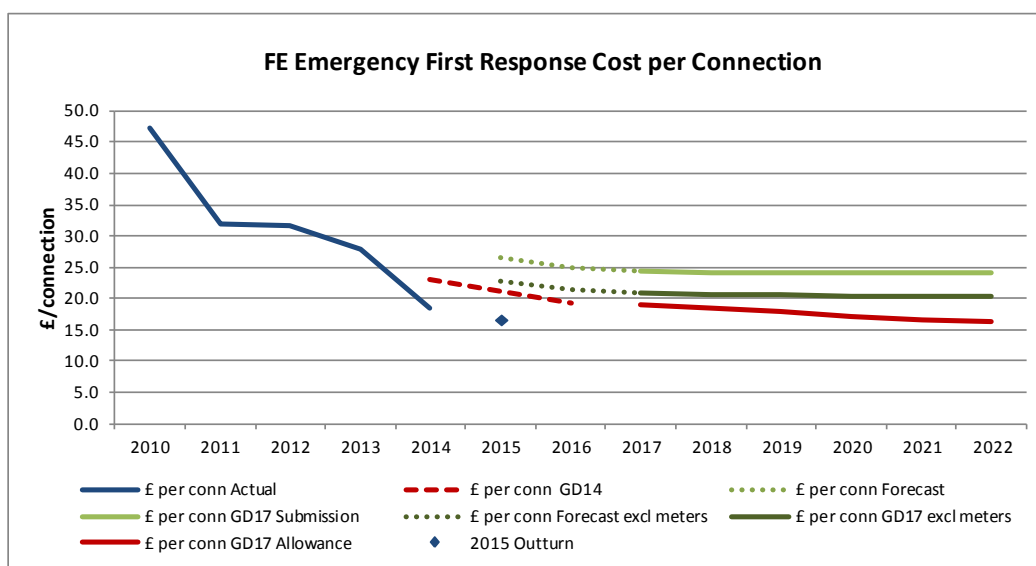


Figure 8 - FE Emergency first response allowance per connection

FE Repair Activity Allowance

- 1.83 Repair team costs result from either gas escapes from main or service pipes due to joint problems (condition problems) or third party interference damage.
- 1.84 We would expect the majority of costs associated with third party damage to be recoverable. FE netted off all of its third party costs with contributions its submission, which is in line with what we expect.
- 1.85 Consideration of FE's overall unit cost of repairs over the GD17 period, following deduction of third party contributions, shows that on average they are lower than the company's actual unit rate in 2014 and those of PNGL
- 1.86 FE's submitted costs have been allowed in the final determination on the basis of the relatively low levels of annual expenditure and the positive unit cost comparisons.
- 1.87 The GD17 allowance is summarised in Table 6.

	2017	2018	2019	2020	2021	2022	GD17 Total
Allowance (£k)	53.3	56.1	59.1	62.2	65.8	69.4	365.8

Table 6 - FE Repair activity allowance, £k

PNGL Emergency Costs

Overview

- 1.88 PNGL has requested a total allowance of £2.31m in 2017 rising to £2.62m in 2022, to cover the cost of the emergency call centre, emergency first response and repair activities. For comparison, historical actual costs for 2013-2014 averaged around £2.21m.
- 1.89 Table 7 summarises the emergency costs submitted by PNGL under each emergency expenditure category.

	2017	2018	2019	2020	2021	2022	GD17 Total
Call centre (£k)	445	451	461	472	475	490	2,795
First response (£k)	1,409	1,437	1,481	1,526	1,540	1,604	8,998
Repair activities (£k)	461	472	485	498	507	522	2,946
Total (£k)	2,314	2,361	2,428	2,496	2,523	2,617	14,739

Table 7 – Emergency costs submitted by PNGL

- 1.90 Table 8 summarises the final determination allowances for PNGL under each emergency expenditure category.

	2017	2018	2019	2020	2021	2022	GD17 Total
Call centre (£k)	445	451	461	472	475	490	2,795
First response (£k)	1,290	1,316	1,355	1,396	1,409	1,467	8,232
Repair activities (£k)	447	458	470	482	491	505	2,853
Total (£k)	2,181	2,225	2,287	2,350	2,375	2,462	13,880

Table 8 - Emergency costs allowed in the final determination for PNGL

- 1.91 Figure 9 shows PNGL's GD17 allowances against the submission, historical actuals and the allowances for GD14.

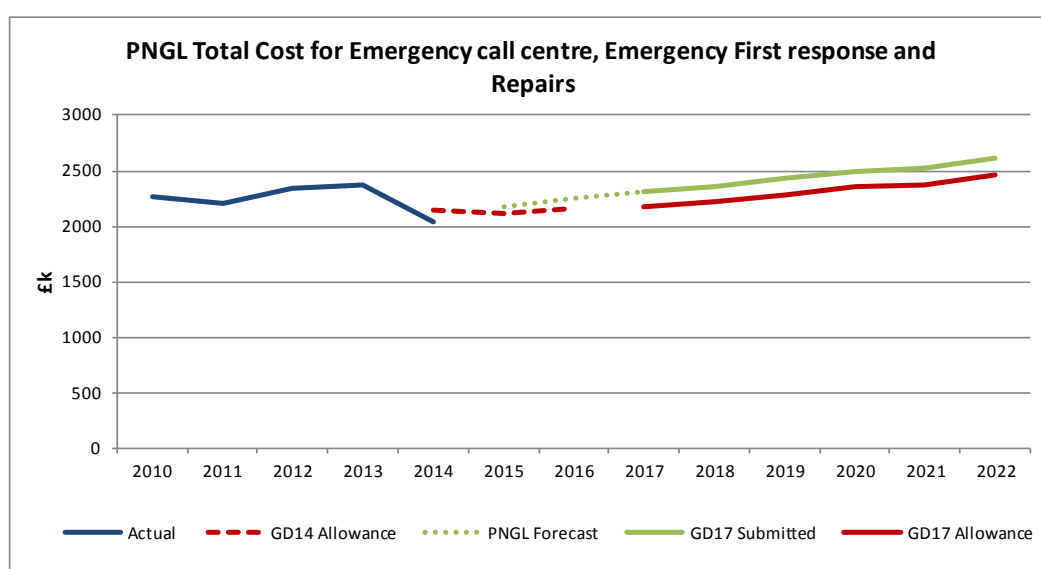


Figure 9 – PNGL Total cost for emergency activities

- 1.92 The key changes from the draft determination have been:
- Adjustment of model assumptions to ensure that the profile of FE's total call numbers is more reflective of historic and projected trends.
 - Revision of projected connection numbers to align with those used elsewhere in the final determination.
- 1.93 The combined effect of these changes had no material impact on the overall assessment for PNGL and so the determined allowances remain the same as in the draft determination.
- 1.94 The key factors influencing the determined emergency and repair allowances are:
- The profit element has been removed from PNGL Energy Services (PES) related works in line with the approach adopted in GD14. This results in a total reduction of £859k.
 - Call volume modelling was used to assess the submitted cost for the call centre. This carried forward the call reduction targets applied in GD14.
 - The number of estimated emergency jobs was adjusted to align with modelled call numbers to assess the submitted cost for emergency first response activity.
 - The cost reductions delivered in 2014 by PNGL as a result of operational changes in the handling non-emergency meter calls are noted and welcomed.
 - As in GD14, and given that all the GDNs have licence obligations about operating a single emergency number in NI, we are asking that the GDNs work more closely together in procuring an emergency call centre contract to ensure that costs are as low as possible.
- 1.95 In its consultation response PNGL acknowledged "the GD17 draft determination allowance as an appropriate allowance to deliver an emergency response service under non-extreme conditions across the PNGL network in GD17".
- 1.96 PNGL however also stated that while it was able to meet the short-term spike in demand in Winter 2010/11, it was "concerned that the allowances proposed by UR would make managing a similar extreme event in GD17 unfeasible. Notably PNGL's contract for utilisation of the National Grid Emergency Control Centre in Hinckley requires consultation where call volumes increased by over 15% for a period of time. PNGL would highlight that the benefits arising from this change have arisen across two relatively benign winters and as such activity levels have been set in that context. PNGL would therefore be concerned that in the context of a more extreme winter, emergency response costs are likely to be abnormally affected".
- 1.97 PNGL therefore requested that the Utility Regulator "consider how additional expenditure required in an extreme event is accounted for under its proposals for GD17".
- 1.98 We have considered the points raised by PNGL but have not made any adjustments to allowances in this regard for the following reasons:
- We would expect PNGL to be prepared for all scenarios as a responsible and prudent operator and to have allowed for all reasonable costs in its submission. There were no reductions in PNGL's requested emergency cost allowances as a consequence of the modelling undertaken. PNGL's requested funding for emergency costs was therefore allowed in full following removal of the PES profit margin element. The allowances are therefore considered sufficient.

- Allowances are made for an average year and while costs in any year may be higher or lower, we would expect this to largely balance out over the price control period.
- A review of the Hinckley contract letter indicates that calls need to exceed the upper banding threshold for a consecutive period of 3 months before consultation occurs and that changes would only be made if this was proven to be a sustained increase. Short duration peaks in demand associated with extreme weather events would not meet these criteria and therefore wouldn't result in a sustained increase in costs.

PNGL Call Centre Allowance

- 1.99 Calls to the emergency call centre comprise of emergency reports that require investigation by a first call operative (FCO) and calls categorised as general enquiries which require no further action.
- 1.100 National Grid delivers the emergency call handling services for PNGL under contract as described earlier in this Annex.
- 1.101 PNGL has requested an annual allowance of £445k in 2017 rising to £490k in 2022 for the handling of emergency calls.
- 1.102 Figure 10 compares actual expenditure and GD17 projections to the allowances determined from the GD14 model. This shows that PNGL are outperforming the overall cost challenge applied.

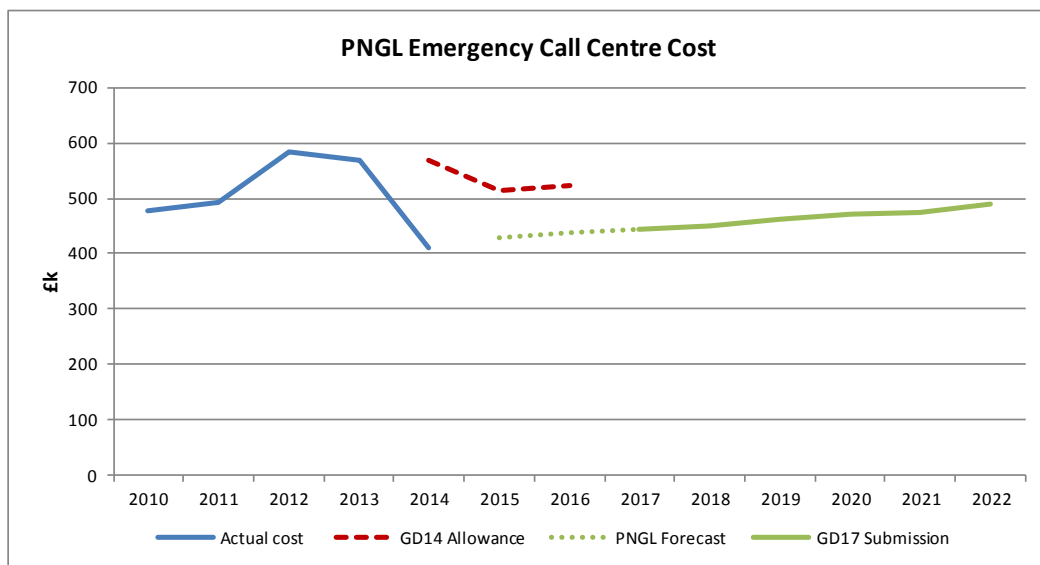


Figure 10 - PNGL Emergency call centre cost submission

- 1.103 The improvement primarily results from the delivery of significant cost reductions in 2014. From this point onwards projected costs appear to increase broadly in line with the GD14 model profile.
- 1.104 PNGL delivered these savings in response to the cost challenge applied by the Utility Regulator in GD14. It has done so by transferring non-emergency meter calls from the emergency call centre to its local call centre in Belfast during working hours. Approximately 60% of non-emergency meter calls have been transferred which reduces the overall number of calls dealt with by the emergency call centre by around 20%.

- 1.105 We welcome the action taken by PNGL and the significant reduction in costs that this achieved. PNGL has achieved this for only a marginal increase in cost at the local call centre.
- 1.106 The recent move to a contract with National Grid which is primarily based on a fixed management fee has established a lower limit of costs for call handling services. The opportunity to reduce costs is therefore restricted to the number of calls that exceed the threshold defined in the contract in any given year.
- 1.107 The action taken by PNGL to transfer a large proportion of non-emergency meter calls to its contact centre in Belfast during working hours will help limit the number of calls exceeding the National Grid threshold.
- 1.108 We considered whether PNGL could transfer any of its remaining meter calls to its local call centre moving forward. We however accept that this would be difficult to achieve. This is because all calls outside working hours are dealt with by the external emergency call centre. In addition it is acknowledged that some of the calls during working hours could be emergencies which would need to be dealt with by the emergency call centre directly. We have therefore assumed that call transfers to the local call centre will remain at current levels in our final determination assessment.
- 1.109 The assessment is therefore based on call numbers from the updated call centre model described earlier in this Annex. The modelled numbers include for a target reduction of 3% per year for calls from existing customers and 1% for calls from new customers from 2018. Commencing target reductions in the second year of the price control provides time for the company to identify and implement changes necessary to meet the target reductions applied.
- 1.110 Although the model estimates higher call volumes at the start of GD17, it estimates lower call volumes from around the middle of GD17 onwards. In overall terms the modelled call volumes are comparable to those submitted by PNGL.
- 1.111 We previously explained why we believe that PNGL and FE should adopt a more collaborative approach to the procurement of call handling services for NI. Notwithstanding these comments, we recognise that the renegotiated National Grid contract represents an acceptable delivery model. We have therefore taken contract rates and applied these to modelled call numbers to assess an appropriate allowance for GD17.
- 1.112 Comparison of the modelled allowance to the costs submitted by PNGL shows that they are reasonable. This is reflective of the savings achieved by PNGL through the transfer of non-emergency meter calls to the local call centre in GD14.
- 1.113 The final determination therefore allows the full amount submitted by PNGL for call handling services as detailed in Table 9 and Figure 11.

	2017	2018	2019	2020	2021	2022	GD17 Total
Allowance (£k)	444.6	451.1	461.4	471.9	475.3	490.3	2,794.7

Table 9 - PNGL Emergency call centre allowance, £k

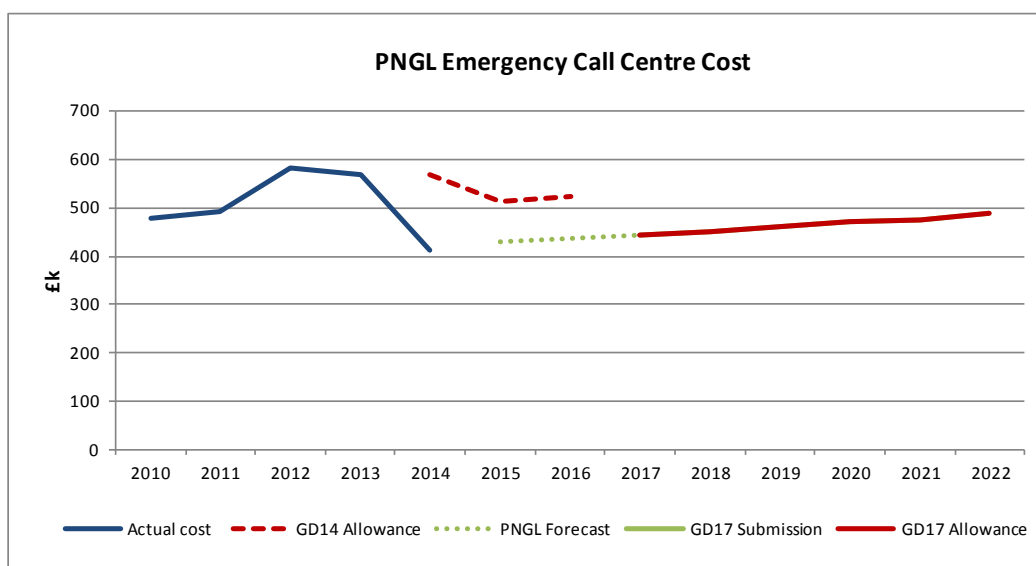


Figure 11 - PNGL Emergency call centre allowance

PNGL Emergency First Response Allowance

- 1.114 Figure 12 compares actual expenditure and GD17 expenditure projections to the allowances determined in GD14 for emergency first response costs. This shows that PNGL are outperforming the overall cost challenge applied.

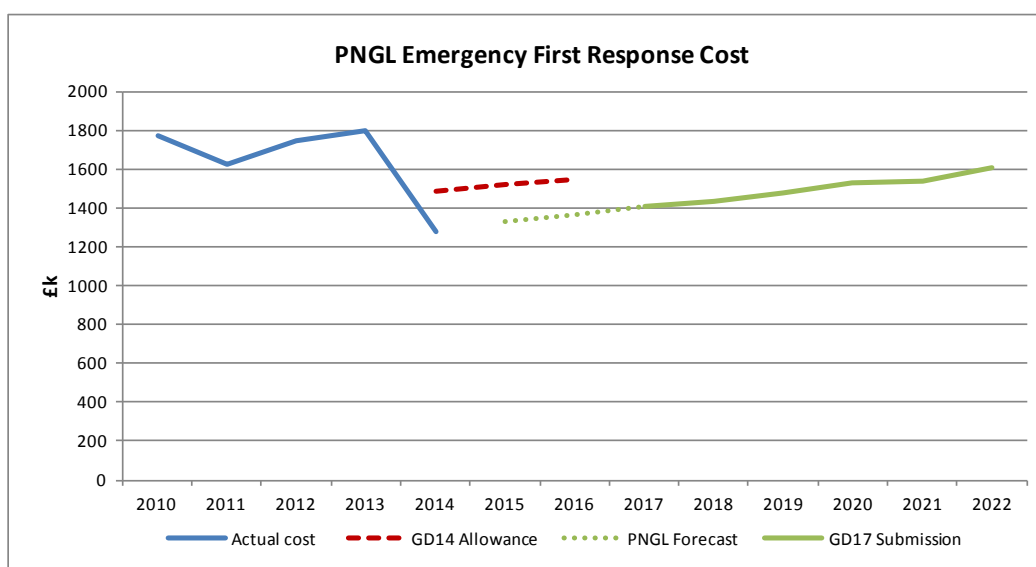


Figure 12 - PNGL Emergency first response cost submission

- 1.115 The improvement primarily results from the delivery of significant cost reductions in 2014. From this point onwards projected costs appear to increase broadly in line with the GD14 model profile.
- 1.116 The delivery of the cost reduction in 2014 coincided with the transfer of non-emergency meter calls to PNGL's local call centre.
- 1.117 PNGL has advised that dealing with these calls at its own call centre provided the opportunity to introduce local operational improvements which increased the proportion that are closed without a visit. PNGL achieved this by investigating the types of call received and improving call handling scripts and operator training to limit the number of jobs created unnecessarily. As a consequence around 30% of meter calls handled locally are now closed without a visit, at a much lower cost.

- 1.118 We welcome the changes introduced by PNGL and the associated cost savings achieved. These are benefits that will continue to be realised moving forward.
- 1.119 We have looked at the variable rate applied by PNGL in its submission to jobs that require an engineer's attendance. This appears broadly reasonable. This is also the case for the much lower rate it has applied to jobs closed by telephone. The company's use of different unit rates to reflect the difference in the cost of closure for each type of job is appropriate. We have therefore concluded that there is no requirement to adjust the allowance on the basis of PNGL's unit costs or their application in the final determination.
- 1.120 For the emergency call centre, the revised contract arrangements limit the ability to reduce costs by reducing call volumes. This is not the case for emergency response, where fixed costs represent a much lower percentage of the total cost. Assuming the proportions of calls in each category remain the same, the target reduction applied to emergency call numbers would also reduce the number that result in a job.
- 1.121 We have reassessed PNGL's contractor costs by applying the company's unit rates to job numbers that have been adjusted in line with the modelled call numbers. A comparison to the contractor costs submitted by the company shows that they are only marginally higher over the period. We have therefore concluded that there is no requirement to adjust the allowance on the basis of the modelled number of emergency calls resulting in a job in the final determination.
- 1.122 In previous price controls we noted that PNGL contracts the delivery of first response emergency services to its subsidiary company, PNGL Energy Services (PES). In line with previous policy, we have decided to disallow profit margins of any related party in GD17.
- 1.123 PNGL has provided information which indicates that the profit element averaged 9.85% over the 3 year period from 2012 to 2014. This has been applied to the submitted contractor costs to determine the associated profit margin that is to be deducted from the allowance.
- 1.124 Table 10 shows the first response allowance for PNGL over the GD17 period following the deduction of the PES profit margin.

	2017	2018	2019	2020	2021	2022	GD17 Total
Submission (£k)	1,408.9	1,437.4	1,481.3	1,526.1	1,540.0	1,604.3	8,998.0
Allowance (£k)	1,289.8	1,315.8	1,355.4	1,396.0	1,408.6	1,466.6	8,232.2

Table 10 - PNGL Emergency first response allowance, £k

- 1.125 Figure 13 shows the GD17 total allowance relative to historic expenditure and the allowance determined in GD14. Figure 14 shows the same figures on a cost per connection basis.

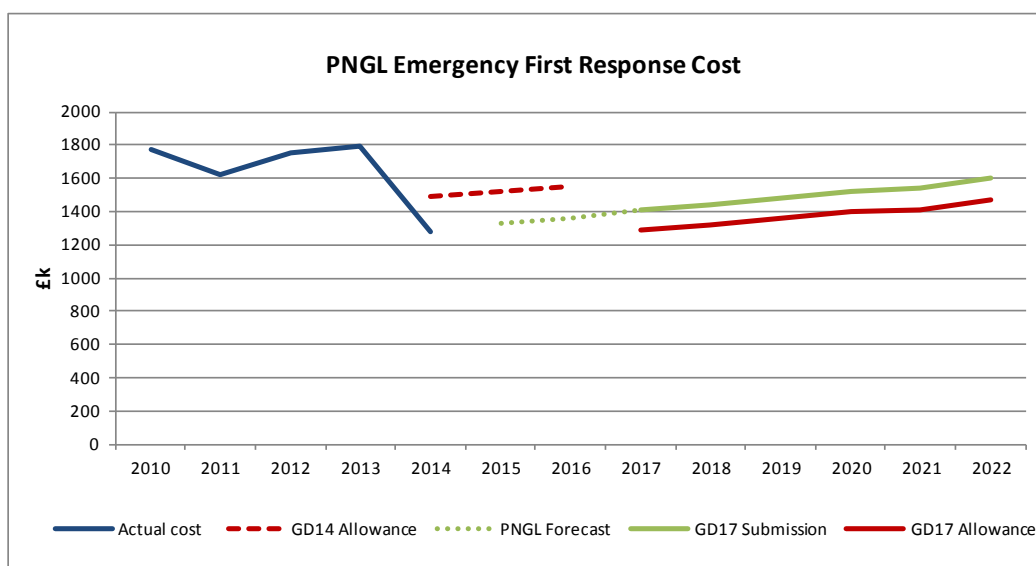


Figure 13 - PNGL Emergency first response allowance

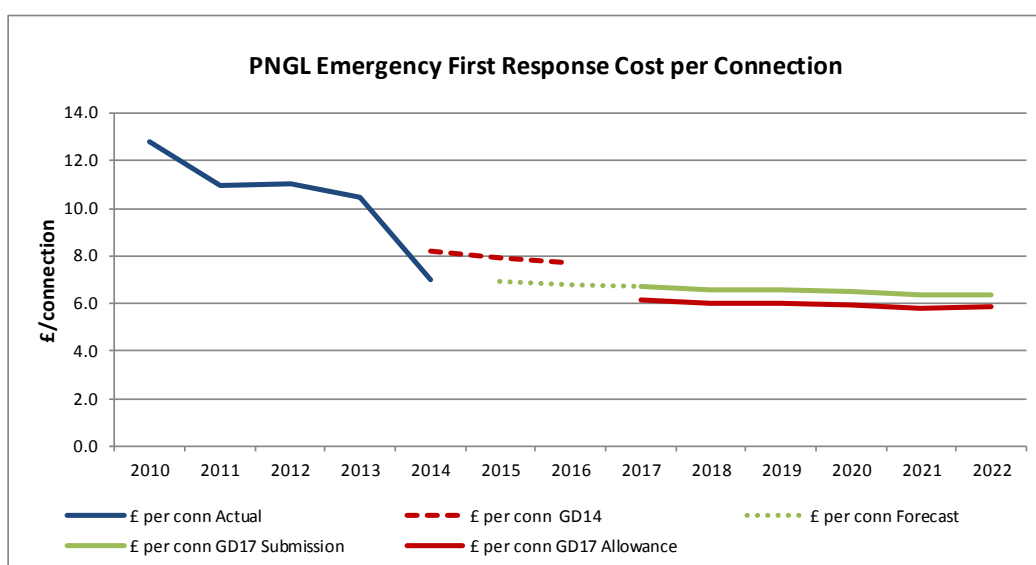


Figure 14 - PNGL Emergency first response allowance per connection

PNGL Repair Activity Allowance

- 1.126 Repair costs result from either gas escapes from main or service pipes due to joint problems (condition problems) or third party damage.
- 1.127 We would expect the majority of costs associated with third party damage to be recoverable. PNGL's original submission only netted off 22% of third party costs with contributions so we queried this with the company.
- 1.128 PNGL advised that all of the actual time and associated costs of undertaking the specific repair are recharged to the third party. Repair costs were subsequently revised and resubmitted by PNGL on this basis.
- 1.129 For the final determination we have accepted the resubmitted figures, which indicate that all relevant third party costs are matched by contributions.
- 1.130 An element of PNGL's public reported escape repairs is also undertaken by operatives from PNGL Energy Services. The profit element of this work has been

estimated in the same way as for PNGL's emergency first response services and deducted from the submitted costs in line with previous policy.

- 1.131 Table 11 shows repair activity allowance for PNGL over the GD17 period following the deduction of the PES profit margin.

	2017	2018	2019	2020	2021	2022	GD17 Total
Submission (£k)	460.9	472.4	485.2	498.2	507.3	522.0	2,946.0
Allowance (£k)	446.7	457.7	469.9	482.3	491.1	505.1	2,852.8

Table 11 - PNGL Repair activity allowance, £k