

Cost Assessment Working Group (CAWG): 26 June 2012

The fourth meeting of the CAWG to inform cost assessment for RIIO-ED1.	From Date and time of Meeting Location	Sara McGonigle 26 June May 10-5.30pm Ofgem, London	28 June 2012
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1. Present

- Mark Cassidy, Scottish Power
- John Gray, Scottish Power
- Bob Parker, Western Power Distribution
- Barry Hollinghurst, Western Power Distribution
- Sarah Walls, Electricity North West
- Jonathan Booth, Electricity North West
- Julian Rudd, UK Power Networks
- Keith Mawson, Northern Powergrid
- Iain Miller, Northern Powergrid
- Mark Kelly, Scottish and Southern Energy
- Kenny McAllister, Scottish and Southern Energy
- James Hope, Ofgem
- Sara McGonigle, Ofgem
- Mark Hogan, Ofgem
- Thomas Johns, Ofgem
- Lawrence Irlam, Ofgem

2. Update on Actions

2.1. The meeting began with James Hope (JH), Ofgem, noting that Ofgem will provide a note of all actions and responses to them with the minutes of the meeting.

2.2. JH also noted that the meeting scheduled for 31 July 2012 in Glasgow will go ahead.

3. Totex

3.1. Bob Parker (BP) and Barry Hollinghurst (BH) talked through the WPD model.

3.2. JH raised the question to WPD whether they have all the data to make the model work and this was opened up to the group. Keith Mawson (KM), Northern Powergrid, noted

that he understood that there would be a quick exchange of the 11/12 data. Sarah Walls (SW), Electricity North West, questioned whether or not DNOs should share forecast data. An action was placed on the DNOs to note what data they require for their models and to cc in all DNOs to their reply to Ofgem. Ofgem agreed to once this is received to respond to DNOs on their views on this.

3.3. Julian Rudd (JR), UKPN, asked WPD if they were happy with the data that they have used in the model. BP noted that the data was put in "warts and all" and no changes were made. SW noted that the results of the model were less important at this stage than the principles of the model.

3.4. Iain Miller (IM), Northern Powergrid, asked WPD the question that all costs have drivers, but do the drivers have costs. BP said no and also noted that there are too many drivers in the model as it currently stands. BP also noted that the approach to drivers taken was a logical one – those with a causal relationship to the activity.

3.5. Mark Cassidy (MC), Scottish Power, asked if WPD had tested the statistical significance of the cost drivers.

- WPD confirmed that they had not as they did not want to "chase an r^2 " and noted that no drivers were perfect.
- While MC accepted that no drivers are perfect, he noted that statistical significance is important and also asked the question of whether further disaggregation leads to the costs drivers becoming less reliable.
- BP stated it would be the opposite.
- SW noted that the fundamental issue in this was that some of the input data from DNO submissions was not correct and as such any significance testing would be flawed.
- JH noted that if the statistical testing of the cost drivers always revealed poor r^2 results, then that would not give comfort in the cost drivers, but equally to state that unless a high r^2 is achieved we should dismiss the cost driver.
- This was accepted by MC but it was agreed that the question regarding statistical significance was a valid one.
- BP noted that while they had not subjected the model to statistical significance testing, they had used it in reality.

3.6. JH noted that the idea of the CAWG is to put a range of tools on the table to assist in determining what works and what doesn't.

3.7. KM asked how the group could gain transparency on any changes/tweaks to the data by WPD. BP noted that despite having some concerns (noted in the slides) regarding the data, they used the data as it stood without making any changes.

3.8. JH asked if WPD excluded outliers. BP answered that this was only in tree cutting due to the range of numbers.

3.9. JH noted that the DNOs (and Ofgem) had not had sufficient time to digest the model and placed an action on DNO to co-ordinate views and feedback to the group. John Gray (JG), Scottish Power, confirmed that SP was happy to do this. SW suggested doing so on the following consistent basis:

- a) What doesn't the model do
- b) How should it deal with outliers and "funny" data
- c) What cost drivers are appropriate/inappropriate
- d) Views on fixed costs.

3.10. DNOs agreed to do so and Mark Kelly (MK), SSE, suggested a teleconference with DNOs to co-ordinate views.

3.11. WPD noted that they are making some changes to the current version. The mechanics of the model will remain as they are but there will be some structural changes to make it more user-friendly.

3.12. Julian Rudd (JR) asked if WPD would be happy to share the MEAV calculation. BP noted that this was based on WPD's predicted MEAV and not actual and therefore was reluctant to share this. However, suggested taking all DNOs data from CV3 and take a median value and use MEAV based on this. Believe there will be little difference and will circulate version 2 with new MEAV as quickly as possible and noted that it will be ready for the beginning of August.

3.13. JH asked the question to WPD if they would rely on the model 100%. BH noted that they did so for their bid for Central Networks and the due diligence was carried out on it at that time.

3.14. Discussion was generated following some of WPD slides, notably:

- Slide 3 on year on year variations at an aggregate level.
 - BP noted that care must be taken on how this is factored in as the year on year variation can be material.
 - JH asked what would be the approach to running 8 year forecast. BP noted that can take a historic average and for the future aggregate or average over 8/9 years.
 - JR noted that it is an option to plot points over a period and leave for companies to explain how they expect costs to move, or alternatively to take an average.
 - SW's view was that some data issues could still arise if companies have poor data capture processes. JH asked how we get around this.
 - MK noted that a range of approaches that are fit for purpose need to be taken for different activities – unit cost checks, high level checks, average costs, exclude costs. MK also noted that we currently only have a few years worth of data based on the current RIGs.
 - BP noted that this is a bigger issue for historic rather than forecast as there are fewer years of reliable historic data
- Slide 4 on year on year variations at a disaggregate level.
 - Phasing issues of individual asset types were noted - there were areas of expenditure and no volume and volume and no expenditure and these must be dealt with for the ED1 models

- JH noted that Ofgem hope that the amendments to the RIGs shed light on this. BP agreed but it is important to be aware of such issues
- JH asked the question if DNOs expect to see the problems with the data highlighted in the WPD's presentation to occur this year again.
- SW's view was that potentially we would. JH asked how we get around this.
- KM noted that some of this would be to answer the question noted above about how we deal with outliers. Excluding outliers and taking over a longer period will alleviate worries on year on year variation.
- JG noted that unit costs are less relevant for longer, lumpier, larger projects
- JR noted that an overall Totex analysis may alleviate some of these issues but BP noted that that is assuming the positives and the negatives cancel each other out in a Totex approach, which we can have no confidence in this being the case.
- MC asked the question: if there are historic years of dubious data, then we must agree an approach to deal with it
- JH noted:
 - RIGs V3 should have dealt with many of these issues, and that for
 - More than 1 model will help with such anomalies
 - We are alive to variation in the numbers
 - Proportionate treatment internally will be adopted to areas where there are known anomalies
 - Ofgem welcome DNOs to be open to where there are errors in the data previously submitted.
 - JH reiterated that all sanctions are open to Ofgem and submitted data with errors to Ofgem will seriously damage a DNO's ability to be fast-tracked. However, there is an obligation on DNOs to do so (via RIGs commentary and the WJBP). As a first point of call, this will be a larger section in the annual report.
 - Discussions turned to the tables appropriate for the cost assessment element of the WJBP and JH noted that this was an action placed on DNOs and Ofgem will review. JH noted that Ofgem were reluctant to change the structure of the RIGs (something shared by the DNOs). MK noted that SSE would not advocate any further tables.

- Slide 11 on use of expenditure as an activity driver
 - BP noted that this should be avoided as far as possible but that was difficult for things like project management and network design. For those areas it's important to look at efficient costs and not actual costs. IM supported this and noted that network design can be the same cost regardless of whether the work concerns a £12m or £1m project, for example.
 - SW noted that we must also have a model that looks at the solution to a problem. For instance, if network design comes up with a solution that avoids investment

3.15. JR gave the group an update on the Totex work commissioned by UKPN in associate with SSE, SP and NPG. JR stated that the first paper will be available in July and there will be a level of work completed prior to the September paper. JR agreed to circulate an initial paper being developed by Frontier Economics on their initial views on the Totex work. Ofgem suggested this could be discussed at the meeting on 8 September.

3.16. KM then presented NPG's view on the relative merits of disaggregated and aggregated models, recognising that it is likely that there is a need to do both.

3.17. BP noted that if we elect to go for a disaggregated model and not aggregate up, must make a contractor adjustment.

3.18. Mark Hogan (MH), Ofgem presented view on the GD1 approach to Totex.

3.19. Regarding slide 8, JH noted that it is Ofgem's preference that assumptions are made explicit upfront.

3.20. JH then noted that regarding scenarios, a paper is being produced internally and this will be shared in due course.

3.21. The middle-up approach was adopted in GD1 and there was consensus that this might be useful approach for DNOs (using the key building blocks in C1). BP agreed that WPD could tweak model to also have a middle-up model. They agreed to share this with the group.

3.22. Discussions then turned to what Ofgem's approach to cost assessment should be and in particular its approach to fast track and slow track assessment. JH noted that Ofgem have no firm view at this stage and the purpose of the working groups is to give DNOs the opportunity to put their ideas on the table for consideration. JH then asked DNOs to share their views on what approaches they will be taking and what approach they think Ofgem should be taking.

Action	Person	Date
DNOs to note what data, what level of granularity and what length of data (historic and forecast) they will require to input to their models. DNOs to cc in all DNOs in response to this to Ofgem.	DNOs	29-Jun-12
Ofgem to respond to DNOs on their views on the data required by DNOs for their models.	SM	6 July 2012
DNOs to provide SP their views on V1 of the WPD model.	DNOs	24-Jul-12
SP to co-ordinate the views of DNOs of the WPD model and present at the next meeting.	SP	31-Jul-12
WPD to take CV3 and take median of unit costs and use MEAV in the model (rather than circulate MEAV calculation in V1 of model).	WPD	Early Aug
WPD to circulate V2 of the model (cosmetic/layout).	WPD	Early Aug

WPD to circulate V2 model with July numbers.	WPD	Early Aug
UKPN to circulate Frontier Economics initial view on Totex work.	JR	06-Jul-12
Ofgem to circulate to DNOs the internal paper on scenarios.	JH	TBC
WPD to circulate proposed mid-model.	WPD	24-Jul-12
DNOs to email Ofgem with their approach/range of techniques that they intend to use for the cost assessment part of the WJBP.	DNOs	03-Jul-12
DNOs to send their views on how they believe Ofgem should approach their assessment in fast track.	DNOs	03-Jul-12
DNOs to send their views on how they believe Ofgem should approach their assessment in slow track.	DNOs	03-Jul-12

4. DNO Response to DR5 Benchmarking

4.1. Sara McGonigle (SM), Ofgem, presented feedback to the group on the action placed on them to identify areas where the DPCR5 approach to cost assessment was deemed appropriate for ED1. SM noted that areas of consensus (where work is required and where work is not required) and also areas of differences. SM noted that this was high level at this stage but agreed to send round to the DNOs a later version of the associated spreadsheet, that details the comments made by each DNO and also to add in a column with Ofgem's view.

Action	Person	Date
Ofgem to send an updated version of the spreadsheet on the DPCR5 assessment and add in its views.	SM	06-Jul-12

5. Load Related Expenditure

5.1. Thomas Johns (TJ), Ofgem, presented on Load Related expenditure identifying DPCR5 approaches and where they could be made fit for ED1.

5.2. BP – in DPCR5 the reinforcement of circuits was not fully captured in Ofgem's analysis and therefore excluded from allowances. JB agreed with the view that if a problem occurred and the reinforcement of circuits as a technical solution was put in place the DNO would not receive any credit in Ofgem's DR5 LRE model.. IM and TJ emphasised that any reinforcement in line with historic levels will have been picked up in the DPCR5 model and therefore incorporated in the allowances. Also, one of the key elements of the analysis would be to ensure that DNOs account for any change in approach to reinforcement or change in the level of circuit reinforcement carried out. What was the ratio in DPCR5 and what will it be going forward? How do you adapt a model (do you use LIs or not).

5.3. Slide 24 – BP noted caution in incorporating fault level as in WPDs experience most of fault level reinforcement they were carrying was on the primary network. TJ said you in terms of slide 24 he was referring only to the lower the voltage level.

5.4. IM – Rules of input must have a framework which can flex. BP explained if the same connection reporting takes place as in DPCR5 the market segment unit cost may not be comparable as DNOs will build in their own LCT penetration rates. TJ stated that Ofgem will be using the detailed connections data to understand assumptions made by the DNOs ensuring expenditure above and beyond the DPCR5 market segment unit costs are justified by the DNO.

5.5. Further to this is a cul-de-sac containing 5 houses all decide to they want heat pumps. This then causes a failure on the network and there is need for the transformer to be replaced. The question was raised of who pays this? Are they socialised? If there are 100 houses all requesting heat pumps does that need to go back to the Primary?

5.6. Are the movements between general reinforcement and asset replacement just taken in the round over a price control or is further work needed here? James Hope noted through speaking with some DNOs outside the CAWG, that predictions of growth are more inline/slight uplift compared to DPCR5.

5.7. It was raised that the sorts of things that drive costs are not in the RIGs. Costs are driven by assumption of growth. TJ noted that it is very important to understand where the money does move across categories - ie Does expenditure move from connections into general reinforcement?

6. Non Load Related Expenditure

6.1. Lawrence Irlam (LI), Ofgem, presented on non-load related investment and gave an introduction of the process used during DPCR5 and described some potential areas that may be revisited in RIIO-ED1.

6.2. The replacement curve model used in DPCR5 was not the sole determinant of baselines. There was further profiling done on top of the model through conversation between the DNO and Ofgem. A toolkit approach was used. It was agreed that discussions will always have to take place in order to set the baselines in ED1.

6.3. LI then went through a number of areas that maybe reused for RIIO-ED1.

6.4. There are some modelling complications. IM noted that in areas that it is difficult to back fill your asset age profile. When there is a large standard deviation the model is unable to cope as DNOs report assets that the model considers should not exist.

6.5. BP added that a broader assumption must be assumed. If the DNO is using the model itself it can tailor the model to its own asset base

6.6. It was raised that the model suffered a complication in that it systematically adds in a year delay in asset replacement. This could cause problems as it may move assets from the last year of DPCR5 into the first year of ED1. The model does give a broad indication of volumes. JH noted that it must be alive for higher and lower volumes.

6.7. DNOS agreed that as much as possible should be entered in the model. BP noted that it was possible for poles and support should go back in and that potentially 95% of non-load related could be put in to the model. BP also commented that everything should be as a forecast volume.

6.8. It was discussed that we must learn exactly what was in the non-load model for DPCR5 and make sure that everything is now captured in the RIGs v3. From this it must be decided what is to be added in the future.

6.9. BP noted that each DNO could provide their mean asset life and predicted life.

6.10. The question was asked as to how many years of actuals data were required in DPCR5. LI believed this to be 5 years. This raised the further question as to how many years of historical data would be required to make the model robust.

6.11. Desire from DNOs not to re-cut the DPCR4 historical data. It was noted that we must look to find a way around this. Nick Russ previously had the DNOs look back at their profile but it was suggested in the CAWG that we should start with the present. Ofgem are to take this away and think about the possibility of requiring the back profile.

7. RPEs

7.1. In light of the time restrictions, Ofgem ran through the slides on RPE very briefly. JH made the main point on whether RPE can be balanced out with productivity/efficiency gains. It was suggested that RPE would be greater than the productivity efficiencies but this warrants further discussion and debate. It was agreed to put this on the agenda on the 10 July 2012 meeting.

8. Pensions

8.1. In light of the time, SW ran through slides quickly and JH agreed to circulate the data for each DNO based on the ENWL proposed calculation on slide 7. This will be sent to individual DNOs and they will respond to JH before sharing. It was agreed to put this on the agenda on the for a later meeting.

Action	Person	Date
Ofgem to send pension data to DNOs of the weighted average pension contribution rate.	JH	29-Jun-12
DNOs to comment back to Ofgem on the results of the pension calculation and if approved, Ofgem will share across DNOs.	DNOs	06-Jul-12

9. Any other business

9.1. It was agreed that RPEs and pensions should be discussed at the next meeting. It was also agreed that the next two meetings should be longer in length rather than to add a 3rd meeting. An action was placed on DNOs to suggest where they would like the next two meetings to devote time. Business Support Costs was one area mentioned.

Action	Person	Date
DNOs to send their views on where the CAWG should devote time (on 31 st July, Sep and post Sep meetings).	DNOs	03-Jul-12

10. Date and time of next meeting

10.1. The next meeting will take place on 10 July at 10am at ENA, 6th Floor, Dean Bradley House, 52 Horseferry Road, London, SW1P 2AF.

11. Consolidated list of actions

11.1. The table below provides a consolidated list of actions to date.

	Action	Person	Date	Complete?
Ofgem				
1	Remove Scenarios from C1 in Forecast pack.	MH	01-May-12	✓
2	Ofgem to provide in the minutes a link to the Dartford Determination consultation document.	SM	01-May-12	✓
3	Ofgem to circulate with the minutes comments on costs assessment issues in response to the RIIO-ED1 launch letter.	SM	01-May-12	✓
4	Ofgem to circulate the links to the options value model being used in RIIO-GD1 with the minutes.	SM	01-May-12	✓
5	Ofgem to circulate a redraft of the TOR and submitted comments on the TOR.	SM	04-May-12	✓

6	Ofgem to pull together a straw-man of meeting topics.	JH	04-May-12	✓
7	Ofgem will arrange with James Grayburn to present on the options value model in one of the CAWG meetings.	JH	04-May-12	✓
8	Ofgem to add delete the area in the forecast pack regarding scenarios and add it in separate table for visibility purposes only.	MH	04-May-12	✓
9	Ofgem to find out from Bill McKenzie which working group will be dealing with the issue of pension deficits.	SM	03-May-12	✓
10	Ofgem to provide greater clarity on the "opt-in" principle.	JH	10-May-12	✓
11	Ofgem to provide greater levels of commentary in the tables and for decisions made.	C&O team	ongoing	
12	To engage with colleagues to inform them of a preference of three scenarios.	Ofgem and DNOs	ongoing	
13	Ofgem to provide guidance on the scenarios.	JH	Within 1 month of WS3 report	
14	To confirm that date that James Grayburn will present at the CAWG.	SM	14-May-12	✓
15	Ofgem to provide further guidance on the scenarios and respond to email send by Sarah Walls of ENWL (cc'ing in other DNOs).	JH	15-May-12	✓
16	Ofgem to provide guidance on the elements of the BSC that will/will not be in the public domain.	SM	TBC	✓
17	JH and MK agreed to have an off-line discussion on where best to debate the issue of most efficient solutions.	JH and MK	14-Jun-12	Passed to SP on behalf of DNOs
18	Ofgem to provide further detail on how to assess whole life costs.	JH	10-Jul-12	Meeting on 10 July
19	Ofgem to collate the comments on the critique of the WPD totex model.	JH, SM, MH	26-Jun-12	Passed to SP on behalf of DNOs
20	Ofgem to provide further detail on how the no worse off principle will operate in practice.	JH	No later than Sep paper	
21	Ofgem to put regression analysis and supporting data on NOCs on the FTP.	KH	30 May, 31 May, 1 June 2012	✓
22	Ofgem to provide September meeting dates to the group.	SM	01-Jun-12	✓
23	Ofgem to email DNOs a blank version of ENWLs costs assessment template.	SM	01-Jun-12	✓
24	Ofgem to send summarise all responses to DNO actions and email to the group.	SM	01-Jun-12	✓
25	Ofgem to inform the group of the new date for action 12.	SM	01-Jun-12	✓
26	Ofgem to speak with Regulatory Finance colleagues on plans for cost visits.	SM	08-Jun-12	✓
27	Ofgem to inform DNOs on whether the finance pack	SM	08-Jun-	✓

	should be included in Action		12	
28	Ofgem to pull together thoughts on treatment of substation electricity for DNOs to critique.	JH	14-Jun-12	
29	Ofgem to check and re-run numbers on DPCR5 expenditure on CAIs.	MH	23-Jun-12	✓
30	Ofgem to re-run NOCs analysis with July numbers	KH	03-Aug-12	
31	Ofgem to run July data on new groupings (of CV15) for the September meeting.	KH	Sep-12	
32	Ofgem to respond to DNOs on their views on the data required by DNOs for their models.	SM	06-Jul-12	
33	Ofgem to circulate to DNOs the internal paper on scenarios.	JH	TBC	
34	Ofgem to send an updated version of the spreadsheet on the DPCR5 assessment and add in its views.	SM	06-Jul-12	

DNOs				
1	DNOs to provide to Ofgem thoughts on totex.	DNOs	05-May-12	✓
2	DNOs to come back to Ofgem to state willingness to present thoughts on totex at the next meeting.	DNOs	04-May-12	✓
3	DNOs to give thought prior to next meeting on further iterations of assessing BSCs	DNOs	09-May-12	✓
4	DNOs to provide to Ofgem their thoughts on areas that would merit use of external consultants.	DNOs	11-May-12	ENWL, NPG, SP, SSE, UKPN, WPD
5	Keith Mawson to provide an email proposing some words re RPEs to facilitate consistency in submissions.	KM	10-May-12	✓
6	DNOs to provide a high level view on what data tables should accompany the well justified business plan (WJBP). Take existing reporting templates and indicate how much/little, and in the format (i.e. as is or more aggregation) of these that they thought	DNOs	18-Jun-12	✓
7	To engage with colleagues to inform them of a preference of three scenarios.	Ofgem and DNOs	ongoing	✓
8	DNOs to email Ofgem with more detailed feedback on the Meeting plan (what should be covered, when it should be covered, in what level of detail and what they would like to achieve by the end of each meeting).	DNOs	17-May-12	✓
9	DNOs to provide feedback on the DNO Totex presentations.	DNOs	24-May-12	✓
10	DNOs agreed to feedback to Ofgem their views on the length of future forecasts	DNOs	24-May-12	✓
11	DNOs to provide feedback to Ofgem on the scenario worksheet that was sent out with the July forecast pack.	DNOs	24-May-12	✓
12	To put the 2010/11 data into the WPD totex model and report to the entire group. If not feasible in timescale, an earlier version of the WPD model will be populated with 2008/09 data.	BP and BH, WPD	31-May-12	✓
13	To critique the model in light of the numbers.	DNOs	14-Jun-12	ENWL, NPG, SP, SSE, UKPN,

				WPD
14	JH and MK agreed to have an off-line discussion on where best to debate the issue of most efficient solutions.	JH and MK	14-Jun-12	!
15	MK/SSE to raise the issue at the next LI meeting.	MK/SSE	14-Jun-12	!
16	To present the numbers and comparison at the next totex meeting (26 June 2012).	BH and BP	26-Jun-12	✓
17	How would licensees put forward a justification of lowest whole life cost?	DNOs	10-Jul-12	
18	DNOs will provide their scenarios forecasts no later than 20 December 2012.	DNOs	20-Dec-12	
19	WPD to provide a new date for action 12.	DM	31-May-12	✓ 22-Jun-12
20	SW to share with DNOs and Ofgem ENWL's Excel file that informed the presentation.	SW, ENWL	06-Jun-12	✓
21	DNOs to complete the template on cost assessment activity i.e. views on how cost assessment should be conducted across activities.	DNOs	18-Jun-12	✓
22	AS to check figures on substation cost per unit once receive data from SW and report back on issues.	AS	22-Jun-12	✓
23	DNOs to email Ofgem preferences of submission and visit dates.	DNOs	22-Jun-12	✓
24	DNOs to comment on any issues they have with the NOCs data on the FTP and NOC data presented by ENWL.	DNOs	22-Jun-12	ENWL, NPG, SP, SSE, UKPN, WPD
25	DNOs to detail to Ofgem the key principles that they would apply in running checks on developed models.	DNOs	22-Jun-12	✓
26	DNOs to provide their thoughts to Ofgem on whether different scenarios should be applied when assessing NOCs for the WJBP.	DNOs	22-Jun-12	✓
27	DNOs to provide their thoughts to Ofgem on the potential use of volumes for faults and allowances.	DNOs	22-Jun-12	ENWL, NPG, SP, SSE, UKPN, WPD
28	DNOs to provide their thoughts to Ofgem on the optimum level of aggregation for the troublecall table (CV15) in the costs and volumes RRP.	DNOs	22-Jun-12	✓
29	DNOs to provide Ofgem with their thoughts on the use of the QoS data to produce efficient volumes of faults for each DNO, and then combine this with actual cost data.	DNOs	22-Jun-12	✓
30	DNOs to provide their thoughts to Ofgem on the optimum level of aggregation within the I&M table (CV13) in the costs and volumes RRP to assess unit costs. DNOs should also consider aggregation across tables (elements from the asset replacement table CV3) and the period over which unit costs should be assessed.	DNOs	22-Jun-12	✓
31	DNOs to identify appropriate types of drivers and splits in CAIs on which to develop cost drivers.	DNOs	22-Jun-12	ENWL, NPG, SP, SSE, UKPN, WPD

32	DNOs to provide thoughts on elements of CAIs that will be fixed and elements that will flex depending on scenarios.	DNOS	22-Jun-12	ENWL, NPG, SP, SSE, UKPN, WPD
33	DNOs to identify appropriate treatment of Non Op Capex - where particular elements should be reported and costs drivers.	DNOs	22-Jun-12	ENWL, NPG, SP, SSE, UKPN, WPD
34	DNOs to provide Ofgem details on their potential contribution to smart meters.	DNOs	22-Jun-12	ENWL, NPG, SP, SSE, UKPN, WPD
35	DNOs to present suggestions of an appropriate output for WFR.	DNOs	22-Jun-12	ENWL, NPG, SP, SSE, UKPN, WPD
36	SW to provide Ofgem with note on current understanding of the proposed role and functions of DCC Communications.	SW	22-Jun-12	✓
37	DNOs to note what data, what level of granularity and what length of data (historic and forecast) they will require to input to their models.	DNOs	29-Jun-12	ENWL, NPG, SP, SSE, UKPN, WPD
38	DNOs to email Ofgem with their approach/range of techniques that they intend to use for the cost assessment part of the WJBP.	DNOs	03-Jul-12	
39	DNOs to send their views on how they believe Ofgem should approach their assessment in fast track.	DNOs	03-Jul-12	
40	DNOs to send their views on how they believe Ofgem should approach their assessment in slow track.	DNOs	03-Jul-12	
41	DNOs to send their views on where the CAWG should devote time (on 31 st July, Sep and post Sep meetings).	DNOs	03-Jul-12	
42	UKPN to Frontier Economics initial view on Totex work	UKPN	06-Jul-12	
43	DNOs to provide SP their views on V1 of the WPD model.	DNOs	24-Jul-12	
44	WPD to circulate proposed mid-model.	WPD	24-Jul-12	
45	SP to co-ordinate the views of DNOs of the WPD model and present at the next meeting.	SP	31-Jul-12	
46	DNOs to circulate to all other DNOs agreed "shared data".	DNOs	01-Aug-12	
47	WPD to take CV3 and take median of unit costs and use MEAV in the model (rather than circulate MEAV calculation in V1 of model).	WPD	Early Aug	✓
48	WPD to circulate V2 of the model (cosmetic/layout).	WPD	Early Aug	
49	WPD to circulate V2 model with July numbers.	WPD	Early Aug	