

ENERGY MARKET INVESTIGATION

Notice regarding assessment methodology for losses remedy – appointment of economic consultancy

1. On 7 July 2015, the Competition and Markets Authority (CMA) published its provisional findings and notice of possible remedies (the Notice of possible remedies) for the energy market investigation. Remedy 1 of the Notice of possible remedies was the introduction of a new standard condition to electricity generators', suppliers', interconnectors', transmission, and distribution licences to require that variable transmission losses are priced on the basis of location in order to achieve technical efficiency.
2. On 16 September 2015, the CMA published a notice informing parties of its intention to carry out additional analysis in relation to transmission losses and remedy 1, specifically a new cost-benefit analysis for the introduction of losses-pricing. This notice described the process that the CMA was minded to follow, including the appointment of experts to assist it in running four to five scenarios of likely impacts and developing an appropriate quantification methodology.
3. The response to our notice of 16 September 2015 from parties was supportive of the need to perform new simulations; it recognised the intensely technical nature of the work involved and therefore the need to appoint external experts. Some parties expressed doubt that the work could be carried out in the time-scale implied by our statutory timetable. In the intervening period, the Inquiry Group has decided that the reference period will be extended by six months.
4. Further to the call for tender referred to in the notice published on 16 September 2015, the CMA has received two bids from economic consultancies. Both bidders have (had) working relationships with entities involved in the generation, purchase and supply of electricity in Great Britain (Electricity Companies). We note, however, that given the importance of this analysis to the market investigation, the scale, complexity and tight timeframe of the research being considered, the retained consultancy must have sufficient expertise in this area of research in order to satisfactorily complete this work within a relevant timeframe.

5. For the reasons set out below, the CMA has decided to appoint for this purpose NERA Economic Consulting (www.nera.com), 66 Seymour Street, London, W1H 5BT (NERA).
6. NERA's bid was overall the best against our financial criteria and against our pre-imposed technical criteria. The financial criteria evaluated were project price, and the technical criteria evaluated were:
 - (a) understanding of the CMA's aims and requirements;
 - (b) approach and methodology in meeting the requirements;
 - (c) identification of risks and issues on how these can be mitigated;
 - (d) relevant experience of the subject matter; and
 - (e) project planning and resources to be utilised.
7. As noted above, NERA has in the recent past performed analysis for Electricity Companies. Particularly relevant is its work for RWE npower in preparing a [submission](#) on transmission losses within the context of the CMA's energy market investigation. This work, done in collaboration with Imperial College, demonstrated recent technical expertise in the field. In order to mitigate potential risks of conflicts of interest, special requirements will be included in the service agreement between the CMA and NERA. In particular, for the duration of its work on transmission losses as set out in this notice (the CMA project), NERA will not work on projects for Electricity Companies that relate to the CMA energy market investigation, without obtaining the prior written consent of the CMA. Additional transparency and confidentiality requirements will apply to the individuals working on the CMA project.
8. The terms of reference for the CMA project are included as an Annex to this notice.
9. For the purpose of carrying out its additional analysis on transmission losses, the CMA will:
 - (a) with the assistance of NERA, develop, publish and consult on the proposed scenarios and methodology (set out as per the terms of reference);
 - (b) perform a cost-benefit analysis having taken due account of responses to the consultation;
 - (c) publish and consult on the results of the cost-benefit analysis in a working paper; and

- (d) consider the implications of these results, together with any results that may have been developed and submitted in parallel by interested parties.
10. Given the intensely technical nature of the work involved and its relevance to the CMA assessment, it is important that the CMA appoints an expert consultancy such as NERA and carries out its analysis in a transparent manner. As set out above, parties to the CMA's energy market investigation will be given several opportunities to comment on both the CMA's analysis and results, and to submit to the CMA alternative analysis developed independently. This will ensure that the CMA can rely on clear and robust evidence when reaching a final view on this aspect of its investigation.
11. We would now welcome comments on the above. In accordance with the tight timetable that is necessary for this work, comments are required by **10am on Friday 23 October 2015**. To submit comments, please email Will Fletcher, Project Officer, at EnergyMarket@cma.gsi.gov.uk or write to him at:

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Competition and Markets Authority
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20 October 2015

Pricing of transmission losses: CMA call for tender for simulation work and expert advice

We are seeking bids from experts to perform the following services in relation to a simulation model based Cost-Benefit Analysis (CBA) of the introduction of locational pricing for transmission losses in the GB electricity market.

The expert will perform the following tasks:

1. Work with the CMA to determine up to three to four scenarios for the CBA analysis (possibly based on National Grid's four core power scenarios). Some scenarios may be incremental scenarios on work that has already been done in this area, for example in the context of Ofgem's project TransmiT; or there may be a need for entirely new scenarios. The tender should focus on incremental scenarios in terms of cost, computational needs and timescales. However, the tender should also indicate the resources and time needed to conduct any entirely new scenarios. Incremental scenarios are expected to take plant and grid investments as given and determined in previously conducted work, for example for TransmiT, and only to modify inputs that affect operational decisions.
2. Determine transmission loss factors, possibly from previously conducted work.
3. Simulate the GB electricity system to determine economic costs of generation investment and production with and without charging for losses, possibly including different loss-charging methodologies: averaged (as exists currently), and locational with x/y split for generators/consumers (with two possible x/y scenarios).
4. Provide results of net benefits for consumers and generators, including regional breakdowns and breakdowns by generator in a final report.
5. Present results to the CMA and possibly to an industry open forum.
6. Prepare all inputs and outputs for dissemination to other experts through the CMA's webpages.

We understand that similar exercises have been performed in the past, for example in relation to [Ofgem's](#) and [Elexon's](#) decisions over P229. We would expect the expert to show familiarity with the strengths and weaknesses of that work. A similar exercise [has been submitted](#) to us by RWE for a single scenario from project

TransmiT. We would expect the expert to be able to comment on the strengths and weaknesses of that work.

Timescale

The work is to be carried out between October 2015 and November 2015. The work must be conducted with complete transparency on methods and assumptions, respecting the process that we have agreed to follow with interested parties as described in our [Notice on Losses Methodology](#).

Background

We understand that a simulation for the purposes of this cost benefit analysis will require the following steps:

1. Establishing the capacity scenario, including key variables like renewables penetration, fuel prices, demand and weather – for incremental scenarios, this will be from existing scenarios.
2. Establishing the locational scenario – for incremental scenarios, this will be from existing scenarios.
3. Developing a grid investment plan based on the above – for incremental scenarios, this will be from existing scenarios.
4. Simulating operation to estimate loss factors – for incremental scenarios, this will be from existing modelling work.
5. Simulating operation under different incremental scenarios and loss charging regimes to establish costs.

We understand that several of these steps potentially require iteration. Plant and load location is not independent of grid investment; neither is independent of the loss charging methodology. However, we believe that many of these iterative aspects are second order in magnitude. We would expect the expert to be able to recommend a methodology for any entirely new scenarios that makes appropriate prioritisations given computational and time-scale constraints. We would expect the expert to be able to justify such prioritisations in the delivered report.