



Scottish Council for  
Development and Industry

## POLICY SUBMISSION

CHARGING CONSULTATION DOCUMENT GB ECM-18:  
LOCATIONAL BSUoS CHARGING METHODOLOGY

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SCDI is an independent and inclusive economic development network which seeks to influence and inspire government and key stakeholders with our ambitious vision to create shared sustainable economic prosperity for Scotland.

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## Locational BSUoS Charging Methodology

1. SCDI is an independent membership network that strengthens Scotland's competitiveness by influencing Government policies to encourage sustainable economic prosperity. SCDI's membership includes businesses, trades unions, local authorities, educational institutions, the voluntary sector and faith groups.

### Introduction

2. SCDI has recently published *The Future of Electricity Generation in Scotland* <http://www.scdi.org.uk/energy/research.html> the first major independent study of the Scottish Government's renewable energy targets which was commissioned from the independent international energy research consultancy Wood Mackenzie. It concluded that Scotland can hit its target of 50% from renewable sources by 2020 and maintain exporting electricity to England and Northern Ireland. This would require £10bn of investment in new electricity generation.
3. In the draft UK Renewable Energy Strategy, the UK Government anticipated that around one third of new UK renewable capacity will come from onshore wind. In Scotland, Wood Mackenzie forecast that onshore wind will increase by 5.5 GW, from 1.3 GW today to 6.6 GW in 2020. In comparison, it forecast that just 2.3 GW will be added in England and Wales, and only around 1 GW in Northern Ireland. The report for SCDI has therefore underlined the importance of renewable energy development in Scotland if the UK is to achieve its renewables target.
4. The recently published report by the Electricity Networks Strategy Group suggested that the development of renewable energy in Scotland could be even more rapid. It sets out three scenarios for the growth of renewable electricity capacity in Scotland by 2020: from a minimum scenario of 6.6 GW of wind generation, to a second scenario of 8 GW and a third scenario of up to 11.4 GW.
5. The majority of this renewable potential is located around the Highlands and Islands where the load factor for renewable energy is also generally much higher. The proposed Viking Energy wind farm on Shetland would alone meet 12% of Scotland's renewable energy target and 5% of Scotland's CO<sub>2</sub> reduction target. In total, Scotland has an estimated potential of 36.5 GW of wind and 7.5 GW of tidal power, 25% of the estimated total capacity for the European Union and up to 14 GW of wave power potential, 10% of EU capacity. In the long-term, the renewable electricity generating capacity in Scotland may be 60 GW or more.
6. So Scotland needs to remain an attractive location for mobile global investment. This is essential if the UK is to achieve its mandatory 2020 targets for renewable energy generation and also to put the UK on the path to even bigger prizes: the full decarbonisation of electricity generation; the 2050 climate change target; a new manufacturing and supply chain industry; and the export of power through a new super-grid to Europe to the huge benefit of the UK's balance of payments.

## Grid Access

7. The length of time that new generation must wait for the reinforcements and upgrades to the grid which they require to connect to Britain's transmission networks – particularly for more capacity at the Cheviot boundary between Scotland and England - has delayed and acted as a disincentive to investment.
8. SCDI has welcomed National Grid's ongoing work to introduce a more flexible and responsive network connection regime ('connect and manage') through the Transmission Access Review to reduce delays and more speedily connect projects before major transmission reinforcements are made. SCDI is very encouraged that National Grid has through this process identified two tranches of projects in Scotland, each amounting to 450 MW of installed capacity, which could, as a result, be brought forward and connected to the grid more quickly.
9. It is disappointing that Ofgem's response has been to issue an Open Letter and 'minded to' position to National Grid which has prompted its consultations on locational pricing (GB ECM-18) and commercial balancing services (CAP 170).

## Transmission Charging

10. SCDI has consistently made the case that the current system of transmission charging is wrong and unfair. It has resulted in higher and less predictable charges for Scottish based generators and is a particular disadvantage to those companies developing renewable energy projects in the Highlands and Islands where there is the UK's best and the most reliable sources of renewable power. Scottish generation accounts for 12% of the total, but pays roughly 40% of total UK transmission charges – around £100m per annum more than its 'fair share'. This will increasingly become a barrier to renewable development as growing global demand for turbines drives up the cost of projects, rapid expansion is needed in more marginal areas of the country and the margin of financial return is squeezed. It will also disincentivise investment in extending the life of and constructing new thermal plants to back up the variable power from renewables.
11. SCDI is supportive of the proposals by the Scottish Government, ScottishPower, Scottish and Southern Energy, and the Scottish Renewables Forum for a new methodology in which there is a level-playing field with generators using the UK transmission network being levied at a uniform rate for each unit of energy that enters the system, irrespective of its location. This would appear a simpler, more predictable and fairer system, which is aligned with Government policy objectives and would not impose extra costs on National Grid or the consumer. The proposed approach would support integration of the European energy market.

## Locational Charging

12. In this context, these new proposals represent a significant step backwards. Locational pricing would target the costs of capacity constraints on generation behind a derogated boundary and offer a comparatively limited rebate on

transmission charging; while CAP 170 would impose on generators behind these constraints an operational requirement to provide some balancing services at administered rather than commercial prices. Both proposals would especially impact on generation which is located in Scotland behind the Cheviot boundary. The combined effect would to further increase Scottish generators' costs by £50 million to £100 million per annum, doubling the burden of transmission charging.

13. In addition to these punitive overall costs, the charges for individual generators would be unpredictable from one year to the next and vary considerably depending on the level of supply from intermittent generators and on outages. Renewable generators cannot simply respond to price signals for more power. Nor can they improve the management of the networks. Moreover, the proposals do not address what would be even higher costs for distributed generation.
14. As recent announcements by multinational energy companies have shown, there are investment opportunities around the globe for clean energy generation. However, particularly during this serious credit crunch and economic downturn, finance is not unlimited and they will invest in the most attractive locations. To be competitive, Scotland and the UK need a stable and predictable regime which supports the financing of new projects through a fair and transparent approach.
15. In SCDI's view, the impact of these proposals would, unfortunately, be:
  - To make Scotland less attractive for investment in renewable generation – this impact would be especially severe in the Highlands and Islands, which are behind a number of derogated zones, at a time when decisions are being taken in the next couple of years about investments in major projects such as Viking.
  - To make Scotland less attractive for investment in other clean generation – investment will be made in lower carbon thermal power stations and, potentially, new nuclear, on the basis of benefiting from being able to export power to England, but these proposals would charge Scottish-based generators when, due to grid constraints, they cannot meet customer demand in the rest of the UK.
  - To increase the longer-term risks to security of electricity supply in Scotland – investment in thermal plants in Scotland which will provide 'base load' is in part economically attractive because of the potential to export excess power and if this investment is not made in Scotland, the import of power from England to make up for any temporary shortfall would be limited by the inter-connector.
  - To damage the UK's renewable energy, climate change and industrial objectives – for example, at a time when Longannet is one of four potential sites for investment through the UK Government Carbon Capture and Storage Competition which aims to demonstrate the commercial viability of the technology, it is counterproductive to undermine the case for investment there.
16. Scottish-based generators have been disadvantaged in obtaining access to the grid by capacity constraints at Cheviot which have been recognised for 15 years. National Grid is taking action to alleviate this problem through its work on 'connect and manage', but Ofgem would now appear to be behind proposals

which after their implementation would penalise the same Scottish generators. SCDI is aware of evidence that suggests the competitive market for managing constraint costs is working rationally. But, if it can be shown that there is an issue, SCDI believes that this is likely to be temporary. In contrast what is being proposed as a 'solution' could have seriously harmful long-term consequences.

17. In SCDI's view, the locational charging proposals contravene European Directive 2001/77/EC which clearly calls for charging regimes to be non-discriminatory for electricity from renewable sources, including in peripheral areas, and the proposals for commercial balancing services go against the fundamental principles of BETTA. They do not take into account the impact of demand in England. Most importantly, they are likely to work against the progress which has been made in the Transmission Access Review and act as a disincentive to the objective of investment in renewable and clean energy generation in Scotland.

### Building Britain's Future – New industry, New Jobs

18. Since the launch of this consultation by National Grid, the UK Government has published *Building Britain's Future – New Industry, New Jobs*. This is the UK Government's new strategic plan to invest in the UK's economic and industrial future. Clean energy generation is a priority and SCDI therefore believes that the UK Government's comments on 'The Government and the market' are highly relevant, particularly that "in future, the market-shaping role of regulatory... decisions must be a key concern of policy makers... the importance and potential influence of this role must be recognised and managed more effectively."
19. More specifically on renewable energy it is stated that "clear incentives to produce and use renewable energy, along with action to facilitate installation sites and support for research and development, have given Denmark and Germany a head start in a number of renewable energy technologies... Britain needs to draw on the lessons of this experience in reflecting on how Government action influences conditions or shapes the market for UK-based businesses."
20. The lessons drawn by the UK Government include: "there is an obligation on Government to send clear and transparent signals of its strategic intentions where these will inevitably shape the long term investment decisions made by businesses. This is particularly important where businesses entering a market face large initial investments. In areas like these the right regulatory framework is a key condition for long term investment. It must reflect the need for long term stability, especially in areas where large scale technological or industrial change is needed. For example, this is the case for a number of renewable energy technologies such as low carbon vehicles, wind and wave power, and nuclear power generation. Here the Government itself is not the procurer, but its actions in incentivising or facilitating low carbon or other technologies through regulation, taxation or other action will fundamentally shape the nature of consumer and business demand in the economy, and thus business planning and investment..."

21. It concludes: “Government will not achieve this goal unless there is a machinery and a culture in place that considers and acts on the wider industrial implications of Government action... This practice cannot be limited to one or more Government Departments: it must be replicated across all Departments.”

## Conclusion

22. The proposals in this consultation, regrettably, reflect Ofgem’s outdated and short-sighted approach to charging. National Grid has asked for respondent’s assessment of this proposal against its relevant licence objectives. SCDI has consistently questioned whether the objectives of its licence from Ofgem are fully aligned with the Scottish and UK Government’s energy and climate change policies, and the EU’s renewable energy directive. It would now suggest that it is also inconsistent with the UK Government’s new industrial and regulatory policy.

23. There is a lack of clarity and joined-up thinking between the proposals being brought forward under the Transmission Access Review and in this consultation. Implementing this substantial increase in locational charging for Scotland in the teeth of the current credit crunch and recession would run the real risk of diverting mobile global investment to other countries. Given the importance of Scotland to the UK renewable electricity sector, this would mean that the UK could not remain on the trajectory needed to hit its renewable energy and climate change targets, and deal a major blow to the UK Government’s new strategic plan to achieve international leadership in developing green industries and jobs.

24. SCDI is deeply concerned that these unclear and potentially harmful proposals are being announced, consulted on and introduced with such haste and without a fuller understanding of the consequences. The Transmission Access Review is not yet complete and implemented. The Energy and Climate Change Committee’s inquiry into *The Future of Britain’s Electricity Networks* is at present considering whether locational pricing is a “regulatory barrier” that needs to be “overcome to ensure sufficient network capacity is in place to connect a large increase in onshore renewables, particularly wind power”. The UK Government said in *Building Britain’s Future – New industry, New Jobs* that it will soon publish proposals for adapting the energy grid to the new forms of power generation.

25. In the current investment climate and with these ongoing reviews, inquiries and policy changes, this would be precisely the wrong time to implement these proposals. There would be merit in a detailed review of the whole issue of constraint costs, but it would certainly take place following the implementation of measures brought forward under the Transmission Access Review. By then it will become much clearer whether the significant investment planned for the grid has reduced to acceptable levels and rendered temporary any constraints, which would have negated any need to have brought them forward in the first place.

26. SCDI accepts the view that there are a range of important barriers to investment in new generation, renewable or otherwise, such as the present planning regime. However, it believes that the current transmission charging regime is a significant

disincentive and that a more appropriate approach to locational pricing is needed. It will continue to call for a fundamental review of locational charging.

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