MEG Renewables is an investor in and developer of small to medium scale renewable energy projects, focussing on onshore wind and hydro. MEG Renewables is a wholly owned subsidiary of Mackays Retail Group/M&Co, one of Scotland’s largest retail businesses, with headquarters at Inchinnan, approximately 3000 employees throughout Scotland and the UK, and close to 300 stores in towns and cities from Penzance to Lerwick. The creation of this subsidiary business to develop and operate renewable energy projects is driven by a desire to manage group energy costs while maintaining a commitment to 100% ‘green energy’.

Our strategy has been to develop and operate Feed in Tariff scale projects, typically in the 500kw to 1.5mw range, in conjunction with farmers and landowners, and in so doing, retaining benefits within rural communities. However, as our submission to the Inquiry makes clear, it is exceptionally difficult to deliver such a strategy within the current constraints, despite what appears to be a favourable policy landscape.

Medium scale wind (100kw – 1.5mw) has a significant role to play in the delivery of UK and Scottish Government targets on renewable energy. The 2020 Routemap for Renewable Energy in Scotland lays down a specific target of 500mw of local and community owned renewable electricity generation by the 2020 target date. As things stand, circumstances and policies are conspiring to ensure that medium scale wind will not make any meaningful contribution to our renewable energy targets.

For there to be any realistic chance of us achieving our 2020 targets, we believe that there is a need for greater intervention by the Scottish Government in order to overcome existing planning system obstacles. We would also urge the Scottish Government to exert whatever influence is possible to encourage grid operators to provide proportionate solutions to small and medium-scale developments and finally, we would request that the Scottish Government lobbies against the proposed changes to Feed in Tariffs for medium scale wind, as outlined in the recently published Consultation document.

The following pages contain our responses to those questions which we deemed to be relevant within the Terms of Reference.

We would be happy to attend the committee to provide further information and/or to discuss the issues raised in our response.
(a) Technology

Is the technology to meet these targets available and affordable? If not, what needs to be done?

Medium scale (100kw – 1.5mw) wind turbine technology is available and is well established in more developed renewable markets such as Germany, however manufacturers dictate the specifications. Products are available ‘off the shelf’ with no flexibility on aspects such as hub height or rotor diameter beyond the stated range.

It might be possible for farmers and businesses to fund micro scale renewables, e.g. a Gaia 11kw turbine at c. £50,000 from their own resources. Moving up one level, there are a number of 50kw Endurance turbines on farms, however these will cost c. £250,000.

As a rule, some form of 3rd party funding will be required for turbines above that scale, i.e. in the bandings between 100kw and 1.5mw. Some of the projects that are currently within the planning system have the backing of equity investors, through collective investment vehicles or are being funded by a High Net Worth individual. However this sort of funding is not readily accessible to most farmers, landowners or communities.

As far as bank lending is concerned, there are two alternative routes.

- Secured lending – using the land/farm/buildings or other assets as collateral
- Non-recourse funding – with the loan secured against the renewable energy project itself

Few farms or landowners have the free assets available to offer as security against such a large loan and even where they do, there is an understandable reluctance to risk one’s whole existence against a project such as this, particularly when there is almost constant uncertainty around Government policy and support levels.

In the current market place, the project financing market is limited to a very small number of players, with one bank holding a dominant position. All of the active players require projects to be of a certain capital value before they will consider lending. There are no stated thresholds but broadly, the turbine involved will require to have a capacity of at least 800kw, equating to a tip height of at least 70m, and be from a small number of scrutinised manufacturers before project finance will be made available.

The big problem is that turbines of the scale that are acceptable to the banks for project funding purposes, are generally not acceptable to planners – or at least not when they are presented as single turbine or medium scale developments.

Experience suggests that many or most planning authorities have an effective height limit for small-medium scale turbine developments. This ‘ceiling’ is typically no
higher than 50m (based on tip height) but can be much lower. As indicated previously, the minimum tip height for any ‘bankable’ turbine is in the region of 70m.

Consequently, there is a serious mis-match between what is acceptable to planners and what is fundable by banks, which goes some way to explaining why there have been only 4 wind turbines of between 100kw and 1.5mw registered for Feed in Tariffs in Scotland since the scheme was introduced in April 2010.

Table 1. Medium scale wind FIT installations; April 2010 – January 2012

<table>
<thead>
<tr>
<th>Scotland</th>
<th>Domestic</th>
<th>Commercial</th>
<th>Industrial</th>
<th>Community</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind 100kw – 500kw</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wind 500kw – 1.5mw</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Total mid-size wind</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: Central FIT Register Installations Statistical Report

(b) Supply chain and infrastructure

Is the supply chain in Scotland in place to meet the targets?

There is an established service supply chain in Scotland, ranging from consultants and technical specialists to developers and insurance providers, but there are no manufacturing facilities in Scotland for medium scale wind turbines, which could have an impact upon availability and lead times.

The Scottish renewables sector below utility and major developer scale, has been experiencing tough times of late, with a few high profile casualties including Proven, Shetland Wind Energy and Icon Energy. A number of developers have reined back on their activities, largely in response to the increasing risk of outlays on planning applications proving to be non-productive. The wariness of developers has been increased by uncertainty around Feed in Tariff levels.

Looking forward, being of a service nature, it should be relatively easy for the existing supply chain elements in Scotland to expand as demand grows.

What further improvements are needed to the grid infrastructure at a national and a local level?

Grid is a massive barrier to renewable scale deployment and needs to be upgraded at all levels, however almost as much of an issue is the cost and challenge involved in dealing with the grid operators. For any project to proceed, the critical components of planning, grid and finance need to be in place (this assumes that the wind conditions are suitably positive), and for a project to be commercially viable, the grid costs need to be within certain bounds. Experience to date has been that on some occasions at least, grid operators will put forward a very high connection cost.
estimate to ensure that they meet their response time obligation whilst also making sure that the worst possible cost scenario is covered. (in actuality, grid operators frequently fail to respond within laid down timescales). The consequence of an inflated grid connection cost estimate is that it can stop a project going ahead.

SSE has applied a much more flexible stance of late and genuinely appears to be looking to provide cost effective solutions where possible.

We would urge SSE, ScottishPower and other DNO’s to play their part in delivering our renewable targets at all scales of development. We would ask them not to apply windfarm scale thinking to medium scale turbine projects, but instead, look for more creative and more affordable solutions.

(c) Planning and consents

**Is the planning system adequately resourced and fit for purpose?**

The single greatest challenge facing medium scale wind developments is the planning system. The Scottish Renewables planning conference in November 2011 highlighted the disconnect between government policy (at Scottish and UK level) and the approach of local planning authorities. It was also evident that the planning system lacks the tools to progress any volume of planning applications for small/medium scale developments (i.e. 3 or less turbines) consisting of turbines with a tip height of between 50m and 100m.

Each planning authority has its own stance, however the weight of evidence suggests that councils are largely resistant to turbines in that height range, which broadly encompasses turbines with a rated capacity of more than 250kw. There are cases of larger standalone turbines being consented but this is the exception rather than the rule. There appears to be a broadly applied, but undeclared tip height limit of 50m for medium scale turbine applications.

A review of the classifications used by Local Planning Authorities, reveals that medium scale wind turbine developments are poorly catered for, with many LPA’s having polarised categories covering micro-wind and large wind, but no categories in between. This inevitably makes life more difficult for planners and developers alike.

There can be no doubt that being confronted with the prospect of a large structure, stretching up to several hundred feet in the air and with moving parts, takes the vast majority of planners well outside of their comfort zone. The amount of time required to consider wind turbine planning applications must place significant strain on planning resources across Scotland.

A further concern for prospective developers is the degree of inconsistency and the level of subjectivity within the current planning process. This applies in particular to elements such as visual amenity, cumulative impact and landscape capacity. Planning authorities have been dispensing with the services of in-house landscape
architects, meaning that most of the opinions on visual aspects are essentially unqualified in a professional sense.

Evidence from our own experience, and gathered from other sector participants, reveals that LPA’s are applying very different criteria and processes, in terms of how planning submissions for wind turbine developments are treated. In some LPA’s, the decision as to whether an application is initially determined under delegated authority by the planner or assessed by committee, is shaped by the number of material objections received. For example, if 5 or more such objections are received, the case will not be eligible for delegated authority and will go straight to committee. In the event that the application is refused by committee, an appeal would be heard by Scottish Government ministers. However in at least one LPA, the number of objections has no bearing on how the application progresses, meaning that all applications are reviewed initially under delegated authority, with any appeal being at Local Review Board, i.e. the application is never assessed by anyone outside the LPA.

Many developers, including ourselves, are concerned that an inherent anti-wind mentality within LPA’s means that applications are disadvantaged by being denied the opportunity to be assessed outwith the LPA. The current system means that there can be a case for the developer effectively creating their own objections to ensure that any appeal would be at Scottish government level – although in the case of the LPA cited in the previous paragraph, such an approach would not work.

There is a need for greater consistency and fairness in the treatment of planning applications for medium-scale wind developments by Local Planning Authorities.

An additional complaint, that is frequently voiced, is the time taken and the cost involved in getting through planning – a problem that is undoubtedly exacerbated by the different interpretations (from area to area and between local and national government) of what is an acceptable development.

There is a strong and increasing body of anecdotal evidence in support of the aforementioned concerns, however the only hard data available on planning outcomes are the FIT Installation Statistics highlighted earlier in this response. While the FIT data would appear to support the contention that the planning system is blocking the delivery of medium scale renewable energy projects and consequently, the achievement of our renewable energy targets, there is a need for a clearer view of what is happening inside the planning system.

Information on individual planning submissions is in the public domain through the LPA’s websites, however there is no collated view to support or disprove the view that medium-scale wind development applications are not getting through the planning process.
We propose the establishment of a central tracking system to monitor the performance of planning authorities in terms of approval rates by turbine scale, time taken for decisions to be made once in possession of all required information and adherence to national policy guidelines. With the advent of ‘e planning’, and its use by most if not all planning authorities, it should be relatively straightforward for this data to be collated and published.

It is appreciated that planning resources are being stretched as a consequence of budget pressures. There has also been an issue with developers submitting large volumes of poorly prepared planning submissions. The latter issue needs to be addressed; however there is still a strong sense that the relationship between planners and developers remains overly adversarial. A more co-operative approach would be of benefit to all, with the request being that planners find more time to meet with developers and ideally visit proposed sites. This might help avoid clogging up the planning system with sites that are not suitable for development.

There is a pressing need for additional resource to be provided to local planning authorities and for planners to be given specific guidance and training in handling applications for medium size turbines. We are confident that the renewable energy sector would be willing to assist in this training process; a process which could ultimately enhance the working relationship between prospective developers and planners.

### How can national priorities be reconciled with local interests?

Both the UK and Scottish governments have signed up to ambitious targets around renewable energy generation. In the case of Scotland, the targets have been described in the 2020 Routemap document as the ‘most ambitious in Europe’.

It is clear from the table below, that there is going to have to be a sharp increase in the deployment trajectory for the headline targets to be achieved. At a UK level, this push for renewables is supported by a range of policy support initiatives including the Renewable Obligation, Feed in Tariffs and the Renewable Heat Incentive.

#### Table 2 Renewable energy targets by 2020

<table>
<thead>
<tr>
<th></th>
<th>2020 Target</th>
<th>Latest position</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK Government</td>
<td>30% of electricity from renewable sources</td>
<td>6.7% - 2010</td>
<td>(Source: Dukes Energy)</td>
</tr>
<tr>
<td>Scottish Government</td>
<td>Equivalent of 100% of electricity demand to be met by renewables</td>
<td>24.1% - 2010</td>
<td>(Source: Scottish Govt. data)</td>
</tr>
</tbody>
</table>

In spite of the favourable policy landscape, all indications are that, despite a concerted industry effort, medium scale wind will struggle to deliver anything like the contribution that is anticipated, under the current conditions.
Within the 2020 Routemap for Renewable Energy in Scotland, a specific target of 500mw of local and community owned renewable electricity generation was laid down. While this encompasses all forms of renewable electricity generation, medium-size wind is expected to be a major contributor. Turbines of this size lend themselves to local ownership and as such, revenue stays in the local area.

Table 1 makes it very clear that there is negligible activity of late within the key categories that will contribute to the 500mw target for community and locally owned projects.

There is undoubtedly a disconnect at present between national policy and priorities and local interest, as interpreted by planners. For Scotland to achieve its renewable energy targets by 2020, there will have to be a quantum shift in the local planning process as it stands. While national policy is very supportive of renewable energy development, there appears to be no such sentiment at local authority level. Our experience has been that, in spite of the decreed presumption in favour of medium scale wind developments, there is always some way in which a local authority can legitimately block a planning application.

Some local authorities have been much more receptive than others, and each seems to have their own interpretation of what constitutes capacity. It would be an interesting exercise to establish whether the combined capacities of each LPA add up to a total in excess of the Scottish Government’s target.

We believe that a key first step towards achieving greater reconciliation between national and local positions would be the establishment of a central database, as described previously, to track wind turbine and other renewable energy developments through the local planning process.

One argument put forward by planners against larger single turbines (e.g. 500kw) is that they are disproportionate to the energy requirements of the associated property. This fails to take account of the role of medium scale turbines as a vital source of diversified income for farmers, landowners and local communities. It is envisaged that this point will be covered by the Scottish Government’s Agri-Renewables Strategy when it is published in the summer of 2012.

We would propose the creation of a planning band for mid-size turbines with a maximum tip height of no less than 80m, to be applied by all local planning authorities in Scotland. This should form part of a broader initiative to introduce consistent planning categories and processes throughout Scotland.
(f) Energy market reform and the subsidy regime

Are the reforms of the energy markets and subsidy regimes at both UK and EU level sufficient to meet the challenge of the Scottish Government's renewable targets?

Feed in Tariffs were introduced in April 2010 to stimulate the development of distributed renewable energy. A series of bandings were introduced to cover different technologies and scales, with the underlying intention being that investors would achieve a return on investment of 5-8%.

In response to a surge in larger-scale solar pv developments (5mw), there was an emergency review of the tariffs for large scale development, which came into force in August 2011. There has subsequently been a further unscheduled review in response to the large scale uptake of domestic scale solar pv, driven by alternative funding models.

Medium sized wind forms part of the current Feed in Tariff Consultation, which runs until April 2012. The Consultation document issued on 9 February recognises that the capital costs for medium scale wind projects are higher than in the previous model, however this is countered by an assumption that load factors will be higher than previously estimated. According to DECC’s calculations, this will result in medium scale wind projects delivering a return on investment at the high end of the 5-8% target range.

We would propose that the minimal number of FIT installations to date (see Table 1) suggests that the existing tariffs are too low, rather than too high, and in answer to the question, are not sufficient to meet the challenge of the Scottish Government's renewable targets

Neil McGeoch, Managing Director
MEG Renewables
28 February 2012