Dart Energy (Forth Valley) Limited

DPEA Reference:
PPA-390-2029 and PPA-240-2032

Proposed Development for Coal Bed Methane production, including Drilling, Well Site Establishment at 14 locations, Development of Inter-site Connection Services, Site Access Tracks, a Gas Delivery and Water Treatment Facility, Ancillary Facilities, Infrastructure and Associated Water Outfall Point
Letham, Falkirk

Final Representations on NPF3, SPP (June 2014)

1. Introduction

1.1 There are six matters arising out of the supplementary submissions made by CCoF, FoES and Falkirk Council in respect of the proper interpretation to be applied to the relevant advice in NPF3 and SPP concerning the exploitation of onshore CBM on which the appellant would wish to take this opportunity to respond. These are:

(i) the impact of unconventional gas exploration and development on Scotland's climate change targets ("Climate Change");

(ii) the need for the appellant at this phase of the development cycle at Airth to disclose details of the "maximum extent of its operations" ("Full Field Development");

(iii) the need or otherwise for an operator to disclose all available information ahead of the determination of an application for onshore oil and gas development ("Full Disclosure");

(iv) the need or otherwise for buffer zones to be applied ("Buffer Zones");

(v) the relevance of the development proposals to the national development at Grangemouth ("Grangemouth"), and

(vi) the impact of the finalised terms of SPP so far as it relates to onshore unconventional gas exploration and production on the Councils' respective local development plans ("the LDP Impact").

1.2 Before doing so, however, the appellant would remind the Reporters of the following facts:

a) both the draft NPF3 and SPP were the subject of a Strategic Environmental Assessment Environmental Report (the SEA") that was prepared in accordance with the requirements of the Environmental Assessment (Scotland) Act 2005 ("the 2005 Act"). In terms of Schedule 3 of the 2005 Act the SEA is required to describe and assess the likely significant effects and mitigation and monitoring proposals. The potential impacts of the framework and the national planning policies on population and health were key issues for consideration. As was air and water quality. Their respective impacts on the Scottish Government's climate change objectives was also a key consideration;

b) in terms of Section 3D of the Town and Country Planning (Scotland) Act 1997 it was incumbent upon the Scottish Ministers to ensure that when it came to their drafting of the national planning framework and the national planning policies collectively and individually they would contribute to "sustainable development";

c) the previous point is carried over into Section 44 of the Climate Change (Scotland) Act 2009 ("the 2009 Act"). The Act places a duty on every public body to help deliver the Scottish Government's climate change policies in "a way that it considers is most sustainable." As paragraph 19 in the SPP document confirms, "[t]he SPP sets out how this should be delivered on the ground";

d) the Department of Energy and Climate Change Strategic Environmental Assessment for further Onshore Oil and Gas Licensing produced by AMEC (advisers to Falkirk Council and Stirling Council) and published in December 2013 ("the AMEC SEA") confirmed that so far as AMEC was concerned the appellant's proposals would be regarded as a "low activity scenario" given that it involves less than 20 boreholes and 20 hectares of land take. For the purpose of assessing the likely significance of the impact of onshore shale gas and CBM operations on the environment the AMEC SEA defines a "high activity scenario" as one involving 240 boreholes and a land take requirement of 240 hectares. A copy of Appendix B of the AMEC SEA which forms part of the Appellant's Production No. DE (P) 12) and deals with the impact of onshore shale gas and CBM exploration and production on climate change is attached to this submission for ease of reference and is hereinafter referred to as the "AMEC SEA Appendix";

e) the importance of properly interpreting planning policy documents, such as NPF3 and SPP, in accordance with the language used and read always in its proper context has recently been reiterated by the courts (see *Tesco Stores v Dundee City Council [2012] UKSC 13* and *Europa Oil and Gas Ltd v Secretary of State for Communities and Local Government [2014] EWCA Civ 825*);

f) at paragraph *v* on page 3 SPP explains that it requires to be read and applied as a whole. It also points out that where the word "should" appears in the document, it reflects the Scottish Ministers' expectations of how an efficient and effective planning system should operate. It does not reflect a legislative requirement. A glossary of the terms used in SPP appears at its end; and

g) the copy of the letter from the Minister of Local Government and Planning addressed to FoES dated 23 June 2014 ("the Ministers' Letter"), which accompanied the FoES submission, makes it clear that, if necessary, the national planning policies for onshore oil and gas will be amended to reflect the most authoritative sources of scientific and medical advice. The inference to be drawn from this advice is that the Minister is satisfied that the policies on CBM set out in the recently published SPP reflects the most up to date and authoritative scientific and medical advice available on the subject.

1.2 Turning now to address the six matters referred to in paragraph 1.1 above.

2 Climate Change

2.1 The appellant's position in relation to this matter is straightforward. Read together the advice set out in paragraph 4.26 in NPF 3 and paragraph 235 of SPP makes it clear that the Scottish Government recognises the need, ahead of the long term target for energy requirements to be met entirely from renewable sources, to maintain, at least in the short to medium term, a diverse energy mix. In recognition of the potentially long lead-in time between obtaining planning permission, exploration and production (a point missed by CCoF) reserves of coal bed methane are specifically identified as a source of contribution towards a secure energy supply in the "medium" term, which the AMEC SEA confirms should be regarded as being between three to ten years down the line (see B7.61-62). SPP provides a specific framework for its sustainable exploitation.

2.2 When properly understood the use of the word "could" in the paragraph does not mean, as CCoF suggest at paragraph 8 *a* of their supplementary submission, that the Scottish Government is looking for planning authorities to defer any consideration as regards whether or not CBM could contribute a secure indigenous supply of natural gas for anything up to 10 years. The point that CCoF have failed to appreciate is that SPP provides a policy framework to inform the management of planning applications. On a proper construction of the advice in NPF3 it is clear that the use of the word "could" in paragraph 4.26 simply reflects an acknowledgement on the part of the Scottish Government (one which is also made by the onshore unconventional gas industry in the UK) that the reserves of CBM in the Scottish Midland valley of which Letham Moss forms part have the potential to contribute towards energy supplies in the UK over the next 3-10 years and beyond. The point is that the only means by which the full extent of that acknowledged potential can be established is through the grant of developments such as the one that is the subject of the appeals that will be carefully regulated to avoid negative environmental and community impacts.

2.3 The use by the Scottish Government of the word "secure" in NPF3 has been highlighted to emphasise the importance in the current global political climate of both Scotland and the UK continuing to have relative ease of access to secure supplies of energy. The appellant would ask that you, Ma'am and you, Sir attach very significant weight to this aspect of the Scottish Government's advice.

2.4 If the Scottish Government did not wish CBM to be exploited as a source of contribution towards a secure energy supply it is reasonable to assume that it would have specifically said so in SPP rather than provide a bespoke development management framework to regulate the manner in which it is extracted.

2.5 It is also reasonable for you, Ma'am and for you, Sir, to assume that, ahead of its decision to include that bespoke policy framework in SPP, the Scottish Government was reassured that the SEA (having taken full and proper cognisance of the level of regulatory oversight that would be applied to the onshore oil and gas industry through the application of that framework at development management level) had concluded that no significant adverse effect on air and water quality and on public health would arise.

2.6 Similarly, in providing that bespoke framework, it is also reasonable for you to assume that the Scottish Government was also satisfied that the practical application of the SPP framework would ensure that it had complied with its statutory duty under the 2009 Act to carry out its functions as the national planning authority in a manner which would not only "facilitate the transition to a low carbon economy, particularly by supporting diversification of the energy sector", (see para. 17 of SPP) but also help deliver its own climate change adaptation programme in the "most sustainable" way possible.

2.7 If those points are accepted, it follows that no weight can be accorded to the submissions put forward by FoES that "this development goes against the grain of the type of development that is envisaged by the NPF3." The fact of the matter is that on a proper interpretation of the framework and the national policies it goes entirely with "the grain" of the Scottish Government's aspirations which is why SPP contains a bespoke development management framework for CBM extraction.

2.8 The only difference between the UK Government and the Scottish Government is that the latter is, as the Minister made clear to FoES in his letter of 23 June 2014 "proceeding more

cautiously on the opportunities that development may present". The crucial point that CCoF and FoES miss from the terms of the Minister's Letter is that it confirms that through the provision of the development management framework in SPP the Scottish Government is "proceeding" to explore the opportunities to extract CBM. It is self-evident that it can only proceed to explore those opportunities if planning permission for the appealed development is granted.

2.9 The AMEC SEA confirms that, given the fact that CBM drilling and production sites are usually smaller than conventional and other unconventional sites and tend to be shallower with consequentially shorter drilling times, it can be assumed by you, Ma'am and by you, Sir, that greenhouse gas emissions arising from the construction activities and drilling (per well) will be "less" than those associated with conventional and other unconventional oil and gas exploration and production. It should also be noted by you that AMEC also reported to DECC in the AMEC SEA Appendix that the lifecycle emissions associated with CBM will be "comparable" to gas extracted from conventional sources, "lower" than LNG electricity generation and "significantly lower than coal." (see Appendix B, Section 7 of DE (P) 12).

2.10 Crucially, given the concerns expressed by FoES, AMEC also confirmed in the AMEC SEA that CBM production and consumption will "not be expected to displace energy generation from renewable and low carbon sources nor disincentivise investment in renewable and low carbon technologies" (see AMEC SEA Appendix).

3. Full Field Development

3.1 The appellant has been criticised by CCoF (but not, it will be noted, by Falkirk Council, Stirling Council nor indeed by FoES) at paragraph 11 *a* its supplementary submissions for not revealing what it describes as the appellant's "plans for full field development". In making this criticism CCoF cite the provisions of the second "bullet" point set paragraph 240 of SPP. It may assist a proper interpretation of the policy advice (see para. 1.2 (e) above) if the full wording of that bullet in paragraph 240 is set down for ease of reference.

3.2 It states that for areas covered by a PEDL local development plans should:

"encourage operators to be as clear as possible about the minimum and maximum extent of operations (eg number of wells and duration) at the exploration phase whilst recognising that the factors to be addressed by applications should be relevant and proportionate to the appropriate exploration, appraisal and production phases of operations".

3.3 It is again self-evident from the description of the appellant's proposals at Letham Moss that this is not an application for an "exploration phase". The issue concerning the provision by the appellant of information to the Reporters regarding the maximum extent of their operations at Letham Moss therefore, simply does not arise.

3.4 The relevant advice for the purposes of the determination of the current appealed applications is that the factors which the appellant need to be seen to have addressed in them and the accompanying ES are "relevant" to the production phase of operations and that the information provided should be "proportionate". So far as the appellant is concerned, this advice has been followed in full by it and its consultants both in terms of the relevance of the information submitted and its proportionality relative to the scale of the development and the fact, as explained at the relevant inquiry session, that the sub-surface impacts arising from the drilling operations will be controlled via the separate environmental consenting process operated by the "other regulatory bodies" referred to in the Minister's Letter.

3.5 In the legal opinion which rebutted the late Mr Gerard Brophy's opinion (see paragraphs 2.46-2.61 in DE 82) DLA Piper on behalf of the appellant explained how the concerns expressed by CCoF in paragraph 11 *a* of their supplementary submissions regarding any future expansion of CBM operations at Letham Moss would be addressed through subsequent applications with the supporting environmental statements being expected to pay particular regard to the issue of cumulative impact. Put simply, there is no "thin end of the wedge". Each application would require to be treated on its own merits.

4. Full Disclosure

4.1 At paragraph 11 *b* in their supplementary submissions, CCoF on reliance of the advice set out in the first sentence of paragraph 242 in SPP (the remainder of that paragraph clearly relating to surface mining operations) criticise the appellant for not having provided sufficient information to enable the decision-maker to make a "full assessment" of the likely effects of its proposals. The key word in the advice (reflecting the "proportionate" advice in paragraph 240 of SPP) is "sufficient". The Scottish Government did not use the word "all", which of course there is no requirement, as CCoF suggests in paragraph 11 *b* of its supplementary submission, that before you, Ma'am and you, Sir, can make a full and proper assessment of the likely effects of the development on the environment you must first have before you "all available and relevant data". All the available relevant data that is "sufficient" to allow you to make a full and proper assessment of the environmental effects of the appellant's proposals has been provided.

4.2 CCoF's assertion that no "available and relevant information" regarding the matters referred to sub-paragraph 11 *d* (i) - (iii) of their supplementary submissions is simply wrong. The appellant's witness Andrew Sloan explained precisely what the nature of the chemicals that will be used in the drilling fluids will be. It was also confirmed that as part of the consenting process, full disclosure of the detail of these chemicals will have to be produced to SEPA. The main point to be taken from Mr Sloan's evidence, so far as it related to the chemicals used in the drilling fluids, was that he specifically confirmed that regardless of what specific types of chemical that was used they would all be bio-degradable.

4.3 So far as the chemical composition of, and proposed treatment and disposal of, the sludge from the treated produced water and that water itself, was concerned, again detailed information was provided and indeed ratified by SEPA at the relevant hearing sessions dealing with ecology and the waste management plan. This leaves the issue of information concerning "the underlying geological formations". So far as the appellant is concerned, the issue was comprehensively addressed by the appellant in Mr Telfer's closing submissions at paragraph 2.35 -2.103.

4.4 It will be a matter for you, Ma'am and for you, Sir to decide whether the information that you have before you regarding those underlying formations, coupled to the detailed information that you have concerning the control of sub-surface operations by other regulatory bodies, when taken together with the relevant mitigation and monitoring measures set out in the agreed schedule of proposed planning conditions, is sufficient to allow you to make a full and proper assessment of the likely effects of the development on the local water and air environments.

4.5 In the appellant's respectful submission, you have more than sufficient information before you to allow you to conclude that with the proposed mitigation measures in place, including good well design and construction and monitoring, any potentially adverse impact on the local environment arising from what the AMEC SEA acknowledges is a "low activity scenario" will be insignificant.

4.6 The appellant also strongly refutes the assertion made by CCoF in paragraph 5 and 11 *h* of their supplementary submissions that its assessment of risk and the mitigation measures that it proposes to apply in order to either remove that risk entirely or reduce it to an acceptable level, have not been developed in consultation with the local communities. The EIA which you Ma'am and you, Sir are now required to assess as part of the determination of the appeals has been informed by an inquiry and hearing procedure in which local communities have fully participated. So far as any criticism of the appellant's approach to pre-application discussions is concerned, the appellant would simply invite you to prefer the evidence of the Stenhousemuir, Larbert & Torwood Community Council's representative, Mr Eric Appelbe to that of CCoF.

5. Buffer Zones

5.1 The appellant has now had a proper opportunity to consider the terms of the Scottish Government's advice concerning the relevance and practical application of "buffer zones" set out in paragraph 245 of SPP in the light of the supplementary submissions tabled by CCoF, FoES and Falkirk Council.

5.2 In the light of this review, the appellant has concluded that some of the objectors have misconstrued the advice in SPP relating to the use of buffer zones. The view that appears to have been taken by FoES in particular is that buffer zones have to be proposed to address every identified risk of impact. This approach fails to acknowledge that an identified risk to the environment might be adequately addressed at source through the application of an appropriate mitigation measure other than a buffer zone. An example would be structural planting around the edge of the GDWTF to deal with visual impact, rather than siting it at such a distance from residential properties and public roads that no-one could possibly see it. The same principle applies to noise. The appellant knows that if it uses a certain type of drilling rig and/or applies appropriate noise attenuation measures, then the WHO night-time noise emission level will be met in circumstances where the well-site can be located at a distance of 400 metres (free field) from the nearest residential property. That would be an example of a buffer zone.

5.3 As advised SPP makes it clear, it has to be read as a whole (see paragraph 1.6 above). For ease of reference paragraph 245 of SPP is set out below:

"To assist planning authorities with their consideration of impacts on local communities, neighbouring uses and the environment, applicants <u>should</u> undertake a risk assessment for all proposals for shale gas and coal bed methane. The assessment can, where appropriate, be undertaken as part of any environmental impact assessment and <u>should</u> also be developed in consultation with statutory consultees and local communities so that it informs the design of the proposal. The assessment <u>should</u> clearly identify those onsite activities (i.e. emission of pollutants, the creation and disposal of waste) that pose a potential risk using a source-pathway-receptor model and explain how measures, including those under environmental and other legislation will be used to monitor, manage and mitigate any identified risks to health, amenity and the environment. The evidence from, and outcome of, the assessment <u>should</u> lead to buffer zones being proposed in the application which will protect all <u>sensitive receptors</u> from unacceptable risks. When considering applications, planning authorities and statutory consultees <u>must</u> assess the distances proposed by the applicant. When proposed distances are considered inadequate the Scottish Government expects planning permission to be refused."

5.4 The appellant would wish to draw the Reporters' attention to the following points:

(i) The SPP confirms that where the word "should" (see underlined above) is used in its policy advice it reflects the Scottish Government's expectations of how a proposal for shale gas or CBM exploration and production should be managed and not a legislative requirement ("an SG Expectation");

(ii) The SPP confirms that where the word "must" (see underlined above) is used in its policy advice it reflects a legislative requirement (a "Legislative Requirement");

(iii) The references in paragraph 245 to the need for an operator to consider the application of a mitigation measure in the form of a buffer zones as part of a risk assessment appear in the context of an SG Expectation and not a Legislative Requirement.

(iv) Only if as an outcome of the risk assessment a buffer zone with a fixed set-off distance is proposed as a mitigation measure, will the decision maker be under a Legislative Requirement (on the basis that at that point it will become a relevant material consideration which must be to taken into account in terms of Section 25 of the Town and Country Planning (Scotland) Act 1997) to assess whether the set off distance is sufficient to mitigate the identified impact to an acceptable level of risk.

(v) In assessing the acceptability or otherwise of any identified risk to health, amenity or the environment the applicant and the decision maker is expected to take account of inter alia how these risks would be monitored, managed and mitigated not only through the imposition of planning conditions and obligations under the planning system but also through "environmental and other legislation".

(vi) The only term in paragraph 245 of SPP which appears in its glossary is "sensitive receptors" which is defined as meaning an "aspect of the environment likely to be significantly affected by a development".

5.5 Taken together it is clear that SPP at paragraph 245 is setting out a development management "best practice" protocol as regards how an application for the exploration and/or production of shale gas or CBM should be assembled by an operator in the position of the appellant and thereafter assessed by a local planning authority. The point to note is that it is self-evident that this new best practice guidance has only just been published. Prior to its publication there was and remains no Legislative Requirement for an operator in the position of the appellant to specify as part of an application (a) when a set-off distance or buffer zone has been used to address an identified risk of impact, (b) what the proposed distance between the source and the receptor is, and (c) why the operator believes that the set-off distance proposed is believed to be adequate. This is now the SG's Expectation of what a planning application for the exploration or production of unconventional gas should contain but it is one that is self-evidently intended to inform the relevant policies in LDPs as they are brought forward for review and thereafter the content of future applications.

5.6 It is extremely unfair and indeed entirely unreasonable of the objectors to criticise the appellant and RPS for having failed to have specifically identified within their ES each and every occasion where as part of the EIA assessment a set-off distance or buffer zone has been used to inform the design of the applications when there was no policy requirement for them to do so. As Mr Gair pointed out in his email of 1st July, although the ES may not contain express references to the points referred to at (a) - (c) above, the crucial point is that the principle of a buffer zone being applied as a mitigation measure where appropriate has effectively been "incorporated" into the source-pathway-receptor approach which his Company and RPS applied when it carried out the EIA.

5.7 Following its review of the criticisms levelled at the appellant's evidence by the objectors regarding the extent or otherwise to which the source-pathway-receptor model which it and its consultants applied in carrying out the environmental impact assessment set out in its ES (as supplemented) and the alleged absence of sufficient explicit references to buffer zones within it complies with the Scottish Government's best practice advice as set out in paragraph 245 of SPP, the conclusion drawn by the appellant and RPS is that on a proper construction of that advice what the Scottish Government expects is that when preparing an application an operator is expected to be able to demonstrate in its application that it has taken the following approach to its assessment of risk:

(i) establish whether the proposal for the relevant phase of the overall operation is an EIA development;

(ii) establish through public consultation what aspects of local communities, neighbouring uses and the environment might be impacted as a result of the development (collectively "the Sensitive Receptors");

(iii) identify from the list of Sensitive Receptors those of them which are formally or informally designated for protection by means of legislation and planning policies from inappropriate development, for example, European sites, SSSIs, AGLVs, scheduled ancient Monuments, listed buildings and designed landscapes ("the Designated Sensitive Receptors");

(iv) establish through public consultation what the risks posed by the proposed development to the Sensitive Receptors might be and which of those risks can be identified as "significant" ("the Identified Significant Risks");

(v) establish through the application of professional judgement whether a minimum set-off distance or buffer zone between each Designated Sensitive Receptor and the proposed development should be applied in order to reduce the Identified Significant Risk to an acceptable level;

(vi) establish, apart from at this stage the application of a buffer zone, what mitigation measures (including monitoring) could be used to ensure that each of the Identified Significant Risks relating to a Sensitive Receptor (other than those Designated Sensitive Receptor(s) to which a buffer zone has been applied in terms of the procedure outlined at step (v) above) was either removed entirely or reduced to an acceptable level ("the Mitigation Measures")

(vii) if the proposal is:

(a) an EIA development, establish as part of the EIA assessment (using the accepted source-pathway-receptor model) whether following the application of the Mitigation Measures each of the Identified Significant Risks can be removed or reduced to an acceptable level, or

(b) not an EIA development carry out a risk assessment using the source-pathway-receptor model used in EIA assessment to establish whether following the application of Mitigation Measures each of the Identified Significant Risks can be removed or reduced to an acceptable level;

(viii) if, following the carrying out of the assessment referred to at (v) above, the accepted outcome is that the proposed Mitigation Measures will not remove any one or more of the Identified Significant Risks or reduce it/them to an acceptable level, assess

whether a mitigation measure in the form of a buffer zone could be applied to reduce the remaining Identified Significant Risk(s) to an acceptable level;

(ix) if, following the carrying out of the assessment referred to at (vi) above, the accepted outcome is that a buffer zone could reduce the remaining Identified Significant Risk(s) to an acceptable level, establish (taking account of all relevant technical and commercial viability considerations) the appropriate minimum set-off distance between the source and the Sensitive Receptor needed to reduce the remaining Identified Significant Risk(s) to an acceptable level, and

(x) adjust the development proposal to take account of the above outcomes and submit the application together with, in the case of (a) an EIA development, a statutory environmental statement as required in terms of the Environmental Impact Assessment (Scotland) Regulations 2011 or (b) a non EIA development, a non statutory risk assessment in terms of paragraph 245 of SPP

5.8 In the appellant's view, the step by step process outlined in paragraph 5.7 above is the only means by which the advice set out in paragraph 245 can reasonably be applied in practice. Indeed Falkirk Council would appear to support this interpretation of SPP in that they expressly acknowledge in the first paragraph on the last page of their submissions that measures other than the use of a buffer zone may adequately mitigate the impact of an Identified Significant Risk. So far as the appellant is concerned, apart from the express identification of buffer zones and the specification of the relevant set-off distance between the component parts of the development, the approach which it has taken to the assessment of risk as set out in its supplemented ES accords precisely with the approach that is expected in SPP as outlined above.

5.9 It is noteworthy that none of the statutory consultees and indeed none of the objectors (apart from CCoF) has an issue with the appellant's proposals in terms of landscape and visual impact on designated areas. The clear and indeed only inference that can be drawn from the absence of objection in that regard from those parties is that they are satisfied that the set-off distance between Designated Sensitive Receptors such as, for example, Airth Castle and the Dunmore Pineapple, and the well-sites is appropriate. The validity of the conclusions drawn in the ES was in no way deemed to have been undermined (at least prior to the publication of SPP in June) simply because the ES did not specifically describe the distance between the well-sites and each individual Sensitive Receptor as a "buffer zone".

5.10 It is respectfully submitted that the main issue for you, Ma'am and for you, Sir to consider is whether or not you are satisfied, having taken account of all the evidence before you, that (i) an adequate risk assessment (using the source-pathway-receptor model) has been carried out, and (ii) whether or not, where they are deemed to be appropriate in terms of addressing the significant impact in question, adequate buffer zones have been proposed. When considering this issue the appellant would remind you of the implied use of buffer zones used in its site selection process. This is outlined at paragraphs 2.8 to 2.11 in the ES. Similarly all designations are mapped in Figure 4.1 (Designations Plan) whilst at Table 5.4 the ES identifies all residential receptors that are located with 500 m of any part of the development with indeed exact distances quoted for each. It should also be noted that most topic chapters also start by giving information on the relationship of the site to designated areas, buildings, etc. and in the majority of instance separation distances are quoted. Had the ES been prepared today these separation distances would probably be described as "buffer zones."

5.11 On the issue of buffer zones, the appellant has noted that Falkirk Council have used the request for comments to take the opportunity to criticise the appellant's use of the description "zone of influence" and "sensitive receptors". We will deal with each criticism in turn.

5.12 In respect of the 250 m distance that was used to scope the study area for the ecological surveys, it is clear that that distance was accepted by Falkirk Council and SNH as being appropriate. The survey confirmed that once the proposed mitigation measures were taken into account the risk of significant adverse impact was reduced to an acceptable level. This meant that the need to consider a buffer zone beyond the 250 metres "zone of influence" used in the surveys did not arise. Falkirk Council has made no objection to the proposal on ecological grounds. Its concern appears to be that the appellant in its July submissions incorrectly used the phrase "buffer zone" rather than "zone of influence". That point is noted as simply a misdescription the Reporters will be aware that it was correctly described as a "zone of influence" in the appellant's closing submissions in respect of the relevant hearing session.

5.13 So far as the Council's criticism of the appellant's description in its July submissions of old mine-workings as a "sensitive receptor" rather than as a potential "source of pollution" is concerned, the point would be accepted but for the fact that Falkirk Council has itself misdescribed them as a "source of pollution", when in fact on a proper understanding of their own evidence, the concern of their consultant was that these old mine-workings would potentially offer a "pathway" to draw down groundwater. Over and above that, the Council have failed to understand the main point, which, of course, is that the use of a 250 metre stand-off distance between the horizontal drill bit and old mine-workings (the detailed location of which will be established through the sub-surface consenting process) is deemed by the industry to constitute an appropriate "buffer zone" between the source comprising the horizontal drill and the potential pathway. The Council gave no evidence at the inquiry to suggest that the use of a fixed 250 metre set off distance was inappropriate. Its concern on a proper understanding of its evidence was whether or not there was sufficient information before you, Ma'am and you, Sir to allow you to identify the mine-workings not as the Council now seem to be suggesting whether or not a fixed buffer zone of 250 m was robust.

5.14 Finally, it is noted that Falkirk Council have taken the opportunity to comment on the new evidence in the form of the NPF3 and SPP to re-run the argument that their witness Dr Shaun Salmon posited at the inquiry on its behalf, namely that the appellant has failed "to properly understand the base-line conditions". The appellant's position in relation to this point is set out in detail in its closing submissions in relation to the relevant Inquiry and Hearing Sessions. In summary, the appellant's position is that Dr Salmon by his own admission had little or no experience of CBM or shale gas exploration and production (he accepted that it had been a "big learning curve" for him) and that, consequently, he failed to understand that, given the nature of the mitigation measures, the obtaining of base-line information concerning the actual precise location, quality and quantity of groundwater in the area was simply not required in terms of assessing the impact of the appellant's operations on the local water environment. Indeed he accepted that the proposed monitoring proposals set out in Condition No. 12 in the draft Schedule of Conditions would address his remaining concerns. Dr Salmon was also clearly unaware of the recent case law on the subject, which confirms that in certain instances the obtaining of base-line information will not assist the EIA process. Indeed his primary position at the inquiry that base-line monitoring needed to be obtained prior to the determination of the appeals runs contrary to advice which AMEC have given to DECC in the AMEC SEA regarding baseline monitoring. There the accepted approach as advocated from the outset by the appellant is that the base-line monitoring is carried out after the necessary permits are secured (see the AMEC SEA Appendix). It is self-evident that the permits that are needed to allow the drilling operations to start with a view to establishing the base-line condition of the groundwater for future monitoring purposes (including, of course planning permission) have still to be secured. It would appear, therefore, that Dr Salmon's evidence to the inquiry is at variance with the approach to base-line monitoring which his own Company has recommended to the UK and Scottish Governments.

5.15 For these reasons, it is submitted that it is incorrect for the Council to assert, as they have done in their supplementary statement, that Dr Salmon's evidence has "demonstrated" that the appellant has failed to properly understand the base-line conditions and then assess the potential effects on water features. What Dr Salmon's evidence demonstrates is the precise opposite, namely that due to his inexperience in this area he failed to properly understand that base-line groundwater condition evidence was not required as part of the EIA process and that the appropriate time for that evidence to be gathered, is after the requisite consents have been secured.

6 Grangemouth

6.1 The appellant has been criticised for mentioning in its July submissions the fact that CBM gas from the development might usefully be used at Grangemouth where energy is one of the operator's main overheads. The appellant stands by these submissions. The development could offer local large energy users a local secure source of supply. The weight to be attached to this submission will be a matter for you, Ma'am and you, Sir but it is a simple statement of fact.

7. LDP Impact

7.1 The appellant notes the criticism levelled at it by FoES at paragraph 3.214 of their supplementary submissions. There is a suggestion that the appellant's comments in its July submission should be disregarded because "they are made too late."

7.2 FoES have misdirected themselves on this point. The SPP sets out a development management framework which it expects local authorities in the position of Falkirk Council and Stirling Council to take appropriate cognisance of when they come to draft the shale gas/CBM LDP policies for their areas. For that reason, the appellant is perfectly entitled to provide the Reporter's with a view on the extent or otherwise to which the existing unconventional gas policies in the relevant development plans accord with the Scottish Government's latest policy position.

8. Conclusion

8.1 The appellant respectfully requests that you, Ma'am and you, Sir prefer its submissions in relation to the new evidence and attach weight to them as relevant and valid material considerations in your determination of the appeals.

DLA Piper Scotland LLP

on behalf of Dart Energy (Forth Valley) Limited