Appendix 1 – Consultation Questions

Question 1: Do you agree with our proposal to make cash-out prices more marginal?

SSE supports the proposal to make cash-out prices more marginal. Current prices can be artificially dampened at times of system scarcity, providing inefficient balancing signals and insufficient incentives and rewards for back-up peaking plant to remain open and offer flexibility. Traders are able to carry large short positions into the within-day market with no reserve because the threat of cash-out prices rising to penal levels is not credible, thus increasing the overall cost of balancing. Marginal pricing will provide a more efficient balancing and flexibility signal. Additionally when the system tightens we would expect to see a strengthening of the prompt price feedback into forward markets. This is often disconnected under current arrangements.

Question 2: Do you agree with our rationale for going to PAR1 rather than PAR50? Are you concerned with potential flagging errors, and would you welcome introduction of a process to address them ex-post?

SSE agrees with the rationale to move to a fully marginal PAR1 pricing methodology.

SSE believes that at times the System Operator is overly cautious when flagging, excluding actions for Scottish plant that are not system actions, so we agree that potential flagging errors remain a concern. Equally given the potential implications, the danger of a very high priced system action (e.g. high negative bid prices for constrained off wind) inadvertently setting the price due to flagging error is of great concern. We would welcome the establishment of a robust process to identify and correct such errors ex-post.

Question 3: Do you agree with our proposals for pricing of voltage reduction and disconnections, including the staggered approach?

SSE supports the proposals for pricing voltage reduction and disconnections into cash-out. Their exclusion currently has a dampening effect on prices during times of system stress, leaves Suppliers in particular with the wrong behavioural incentives at times of scarcity given that their positions will always be made longer by a demand control action and thus reduces incentives to invest in reliable flexibility.

SSE agrees that VoLL for consumers (in particular domestic and small I&C consumers) cannot be determined or observed from market behaviour currently, and that therefore an administered price is necessary initially. Ideally as consumers gain more ability to respond to price signals with the introduction of SMART meters and services, a robust average price based on actual behaviour will be able to be developed.

The level of VoLL requires careful consideration given the interactions with the CM and Gas emergency pricing. As the Capacity Mechanism design does not provide for any relief from penalty for gas-fired generation in the event of a gas shortage, and the power VoLL is significantly higher than gas VoLL, gas generation plant would be incentivised to continue to run in the event of a gas shortage (to avoid the CM penalty), or incur a double penalty through both power and gas cash-out exposures if interrupted. This may lead to security of supply concerns for the gas system. A

consistent set of penalties and incentives needs to be developed to ensure an optimum outcome for the market and consumers.

SSE agrees that an adjustment to market participants' imbalance volumes is necessary in the event of demand control actions being invoked, to avoid creating a perverse incentive to allow disconnection to occur and chase a high price. There are however significant practical challenges to overcome to achieve this to ensure that any determination of adjusted positions is robust to legal challenge. Additionally, Suppliers would need to be compensated for foregone customer revenue as the spill revenue received under the current arrangements provides the means of compensation currently.

Question 4: Do you agree with our assessment of the interactions with the CM and its impact on setting prices for Demand Control actions?

SSE agrees that balancing arrangements and the capacity market serve distinct but complementary purposes in guaranteeing electricity security of supply. The objective of a capacity market should be to ensure generation adequacy, not flexibility. Flexibility is a different product to generation adequacy and accordingly should be recognised and remunerated separately. In GB flexibility of back-up generation will become more critical as the levels of renewable generation in the system increase, and this challenge must be addressed separately through the balancing market and/or specific ancillary services.

At the same time there is a clear case that the current market is deficient to incentivise investment in maintaining existing capacity or building new capacity. It has become clear that the risk-reward balance in energy price only (i.e. contracts have price terms but tend not to have fixed volumes) markets, where customers have limited direct sight of energy spot price and limited exposure to direct curtailment, tend not to deliver a price response that will remunerate generators.

SSE does not believe therefore that cash-out reform in itself will fully resolve the missing money problem, but it will help to resolve part of it by delivering improved efficiency and performance incentives. Delivery of a well functioning and efficient Capacity Market must however remain the priority to ensure future generation adequacy and security of supply.

SSE understands the rationale set out by Ofgem for setting a VoLL price below the suggested theoretical average of £17,000/MWh. As the CM is intended to resolve the lion share of the missing money issue and provide sufficient certainty on revenue to cover long-run fixed costs, it seems appropriate to ensure that capacity is not remunerated again through cash-out and that cash-out should reward efficient short-run dispatch and flexibility, allowing effective demand side participation and efficient flow of energy to where consumers value it most highly. Ofgem should carefully consider however whether the level of VoLL at £6,000/MWh is appropriate given the concerns highlighted in response to Q3 above. Equally, the capacity market will use £17,000/MWh (the value associated with disconnection), whereas cash-out will value both disconnections and voltage control at £6,000/MWh, thus creating a significant gap in prices when calculating the CM penalty payment. Furthermore the use of a yet to be defined "z-factor" applied to the capacity market penalty rate will create additional inconsistency between the incentives/liabilities within the capacity market and balancing arrangements.

SSE does not agree therefore that the interactions with the Capacity Market have been fully resolved. Many of the detailed parameters for how penalty payment will work in practice are still unclear and could impact on the acceptability of the proposed regime. The VoLL minus cash-out formula provides a sharp incentive for participants to deliver their capacity obligations but ensures that providers participating in the Balancing Mechanism are not penalised twice for failure to deliver.

Question 5: Do you agree that payments of £5/hr of outage for the provision of involuntary DSR services to the SO should be made to non half-hourly metered (NHH) consumers, and for £10/hr for NHH business consumers?

SSE does not agree that the compensation proposals put forward are workable in practice. Whilst SSE is sympathetic to the spirit and intent of the proposals, we have significant concerns regarding:-

1. *The administrative cost and practicality of implementing a workable and affordable solution, with the significant system changes that would likely be required. For example rota disconnection is likely to occur by system node (e.g. Grid Supply Point) rather than by GSP Group, but national registration systems do not link metering systems to node – how will the DNOs determine which customers are impacted without significant systems change and consequently how will Suppliers determine who is owed compensation. Another example is the likely communication issues presented to customer service personnel in establishing and understanding exactly which set of compensation arrangements should apply in any given circumstance. An increase in the cost to serve is likely to be inevitable in these circumstances;*

2. *The precise definition of what event triggers would qualify as involuntary disconnection and voltage control under the proposal. Demand reduction and disconnection can occur for many reasons (set out below), some of which are already compensated under Guaranteed Standards provisions. Implementing this proposal may lead to consumer confusion as to when/which compensation does and does not apply and in what circumstances leading to further public perception and credibility issues for the industry, or indeed set an expectation by consumers that all demand curtailment events should be compensated. The notion that all consumers should be compensated for all curtailments implies firm connection rights for all consumers, which is not reflected in industry arrangements currently as we do not provide for an infinite system; and*

3. *The principle of paying compensation is flawed when a Loss of Load Expectation is put in place by Government, as this acknowledges that consumers do not wish to pay for an infinite system and 100% security of supply. This implies that connections cannot be considered firm and consumer prices reflect this trade off.*

Question 6: Do you agree with the introduction of the Reserve Scarcity Pricing function and its high-level design? Explain your answer.

SSE agrees that the current methodology for pricing reserve services is less than ideal (an allocation based on actual usage patterns being the ideal), whilst recognising the need for an ex-ante process to provide sufficient information to send a signal that can be responded to.

Therefore in principle SSE supports the aim to develop a replacement ex-ante methodology that provides appropriate signals and better prices the use of long-term reserve contracts during periods of system stress. The Reserve Scarcity Pricing function proposal seems to achieve this conceptually, as it allows the price to gradually rise towards VoLL as margin tightens, however, there remain gaps in the detail of how exactly the proposal will work. We would suggest that Ofgem therefore proceed with caution, further develop the details of the mechanism, and robustly test for unintended consequences (for example could the cost of reserve be inadvertently driven up by the expectation of value determined by the mechanism).

Question 7: Do you agree with our rationale for a move to a single price, and in particular that it could make the system more efficient and help reduce balancing costs? Please explain your answer.

SSE agrees with the rationale for a move to a single price, particularly in the context of moving to marginal pricing that tends towards VoLL. Single price will offer some relief from the increased price spread and the cost that would arise from the additional volatility imposed by (potentially high) marginal pricing. This is important for non vertically integrated market players and operators of intermittent generation that is more difficult to control (e.g. wind power), as it should help reduce their balancing costs.

SSE agrees that it should make the system more efficient and reduce balancing costs, assuming that sufficient incentives and controls remain in place to prevent market participants deviating from their PNs post Gate Closure and/or chasing spill price rather than contracting forward (e.g. strong monitoring and enforcement of PN obligations under the Grid Code, potential application of Information Imbalance charges if problems are encountered).

Question 8: Do you have any other comments on this consultation, including on the considerations where we did not propose any changes?

SSE understands that implementation of any reform is unlikely to occur before Winter 2015 and potentially as late as 2016 given current timetable for review, decision, development and implementation contemplated by Ofgem. SSE would urge Ofgem to consider accelerating the timetable for certain aspects of the proposal (e.g. marginal, single pricing) to ensure implementation prior to Winter 2014 as current market information suggest a margin squeeze and risk to security of supply as early as next Winter. Early clarity on the final policy decision is equally necessary to ensure that appropriate assessment can be undertaken by market participants in advance of the first Capacity Market auction in Winter 2014.

Industry credit arrangements are already seen as burdensome and inefficient by some, particularly for independent market participants, many of whom can only post cash as collateral. Sharper, more volatile cash-out arrangements that can rise to VoLL are likely to increase exposures and therefore the costs of providing security. SSE would urge Ofgem to consider the potential impact both on imbalance collateral arrangements and potential interactions with developing European financial regulation for cleared energy products.

Whilst the impact assessment suggests an economic benefit over the long-term, the short-term effect of sharper, more volatile imbalance prices will be to increase the wholesale energy price, which may

result in subsequent price rises to the end consumer and compound an already difficult public relations challenge for the industry. Ofgem should assist in setting expectations by clearly communicating this risk in its final decision.

Whilst the reforms encourage energy prices to rise towards VoLL to properly value scarcity, it is not clear that other legal and regulatory hurdles (e.g. Competition law, REMIT, TCLC and so forth) would allow the market to price to this level, for fear of inadvertently breaching a regulation and exposure to subsequent consequences, which could undermine the intent of the proposals. Penalty exposure within the CM would suggest that wholesale price should rise to reflect risk, but SSE would urge Ofgem to consider any unintended consequences due to interactions with regulations intended to deter and prohibit inappropriate pricing and market behaviour.