

## **Proposer Response to Panel Questions**

### **2.1.1. Which Parties will be able to benefit from this facility/service and who will pay for it?**

All parties will benefit from this code change as it will apply to all Shippers/Customer. Any Shipper/Customer who is interrupted will receive the SAP price preceding the Day, not the 30 day average.

The costs of exercise of firm load shedding will be smeared to [short Shippers on the basis of imbalance.]

The market will then determine if any cost of firm load shedding is then passed on to customers or not.

It seems reasonable that society (shippers/ consumers) pays for the cost of insurance to have their supply maintained and the party that is firm load shed has improved compensation.

The alternative to not implementing this modification and keeping the status quo is that CCGTs operators leave gas purchasing until the prompt to manage renewable intermittency and market price risk. This places greater risk to society of a gas emergency because signals to attract the required gas will be time limited. If a gas emergency results in insufficient electricity generation, through firm load shedding, Customers will have reduced electricity supply and other services that require electricity.

CCGT operators potentially deciding not to generate on the prompt will commercially have forgone Spark Spread revenue (difference between electricity revenue and gas & carbon costs) but will have avoided the much larger cashout costs on the electricity market up to £6000 MWh, should they be firm load shed.

The example attached is based on the highest prices observed and assumes the emergency occurs on the day after the highest price, from which the change in compensation from the 30 day average SAP to the SAP price of the preceding day can be calculated. In both cases the increase in cost is circa £2.4 Million for 1 Million therms, the energy required by a 700 MW CCGT to operate at full load for 24 hours.

### **2.1.2. How does this new service interact with the DSR product and does utilisation of DSR mitigate/reduce the need for this proposal? (see Modification 0504)**

The market has changed materially since 504, at that time coal fired generation could substitute for gas fired generation and DSR was possible. However, with coal now largely removed that option is no longer available at material scale. Additionally, the electricity market arrangements both in the energy and capacity markets make voluntary load shedding commercially unviable in a tight market. We also note that gas GDN DSR auctions have attracted very little interest in past years. This provides evidence that the potential for voluntary demand side reduction is in fact limited and in practice a gas supply deficit is highly likely to result in the firm load shedding of the largest demand.

### **2.1.3. What is the likelihood of this Modification being required**

The commercial disincentive and barrier to purchasing gas arising from the current market arrangements require this modification to be raised. Without this modification there is a commercial risk incentive not to buy gas in advance which increases reliance on the prompt market. With less long term contractual supply, there is an increased exposure to prompt events and given the escalation of war in Ukraine the risk of supply loss to Europe from Russia either by accident or design have increased.

As to the exact likelihood of the emergency arrangements being exercised this is unknown. But this modification will make the likelihood of an emergency less because a barrier to purchasing gas for CCGTs in advance will be removed from the gas market and thus better enable gas supply to match demand.

#### **2.1.4. Should additional electricity prices be used in scenario analysis?**

It is challenging to predict the commodity prices that will arise in the event of an emergency.

The electricity cashout prices used to illustrate the risk incentive not to sell spark spread in advance in the modification are £6000 /MWh based on the Value Of Lost Load. The highest cashout prices seen to date are £4000 /MWh. The VOLL value of £6000 /MWh seems a reasonable estimate given that an emergency will represent significant market stress above those prices experienced to date which did not have firm load shedding.

In the event that actual historical prices are used to assess cashout risk then values will be 2/3 of the value so £40 Million and not £60 Million.