

Energy Security Board  
**via email:** [info@esb.org.au](mailto:info@esb.org.au)

13<sup>th</sup> July 2018

Dear Madam / Sir,

**Re: Visy Industries Australia Pty Ltd Response to Detailed Design Consultation Paper**

## Introduction

Visy Industries Australia Pty Ltd (“Visy”) is a packaging manufacturer and recycling company with operations in Australasia. While operating in domestic markets, Visy is also a large exporter with significant trade exposure.

Visy is a large consumer of energy including electricity and Natural Gas. Visy has a number of co-generation facilities (including biomass and waste-to-energy) and is also well-practised in demand management. In addition to being a large energy user, Visy also owns and operates the Smithfield Energy Facility - a 170 MWe Natural Gas-fired power station registered as a Market Generator – the facility currently operates as an Open Cycle Gas Turbine (peaking) plant.

Given these various aspects to our business, we take great interest in how the National Energy Guarantee (“NEG”) maybe implemented. In particular, as a large trade-exposed energy consumer, we are extremely sensitive to the cost of energy and the price impacts of the NEG are of core concern to Visy.

While we are not able to conduct a full review of the Draft Detailed Design Consultation Paper (“the Paper”) due to time constraints, please find below our brief submission on the content we have reviewed.

## Reliability Guarantee

### Large User threshold for liability under the Reliability Guarantee

The proposed 5MW threshold for inclusion in the scheme is too low:

- The scheme seems to suppose a level of sophistication for all loads above 5MW to be able to actively manage their supply in a way which would allow them to gear themselves towards easily managing Reliability Guarantee compliance (for example, having indirect access to financial contracts to cover their requirements). In reality, 5MW is only equivalent to the typical minimum liquidly-traded parcel size of wholesale swaps in the futures market = 5MW. For a large user to be able to actively manage its position in a “pseudo-wholesale” manner, its load would have to be at least some multiples of this minimum parcel size rather than just one minimum parcel size
- A point that has been made by others – as the Reliability Guarantee requires liable parties to cover their **peak** demand (as opposed to average or typical demand), the level of cover required by all liable parties in aggregate needs to be seriously quantified and considered in the context of whether the contract market is even able to support this volume. If each 5MW end user was required to cover its peak demand (not to mention large wholesale liable parties) with qualifying contracts and given the fact that no two users peaks will always be co-incident, this will lead to an unnecessarily high level of cover, significantly over what is required to deliver secure supply and quite possibly well beyond capability of the supply side of the market to serve in terms of the quantum of contracts
- For the above reasons, Visy strongly suggests that a threshold for large users to be involved in the scheme be set at 20MW.

### Difficulties in administering a facility-based liability for large users

- As the Paper proposes liability on a facility basis rather than an entity / corporate-group basis, care needs to be taken in designing this
- For example an entity or group of entities may contract for supply to liable and non-liable facilities jointly. If a “pseudo-wholesale” or portfolio-based approach to purchasing is applied across a number of liable and non-liable sites collectively (for example involving swaps, caps and some spot price exposure), there maybe questions arising as to what portion of swaps and caps apply to the particular liable sites as distinct from non-liable sites – it is quite possible that the coverage may not necessarily be proportionate to average or peak demand.

### Measurement basis of threshold – Large User & level of qualifying contracts required

- The Paper proposes that the basis of large user liability and also the level of qualifying contracts required be assessed on the basis of peak demand, being the maximum half-hourly demand in a preceding 12 month period.
- This seems excessive given that, particularly in the case of large industrial loads, peaks at different facilities are unlikely to be co-incident.

- A more appropriate approach would be to use a threshold that captures the *typical* peak in demand rather than the *top single half-hourly demand* in a period spanning 17,520 half-hours (ie one year).
- Visy's suggestion is that 10% probability of exceedance (POE10) demand should be used as the threshold – that is to say that the half-hourly demand representing the 90<sup>th</sup> percentile of half-hourly demands in a year be used

### **Requirement for liable large users to cover their entire load may lead to poorer price outcomes**

- The Paper proposes that liable parties cover their entire loads (to peak demand) during a trigger period with qualifying contracts
- Forcing users to have qualifying contracts in place to cover their entire load / max demand, may prevent users from implementing a more optimal contracting strategy from an average price perspective - for example a user may wish to leave marginal load exposed to spot as part of a strategy to minimise average price – this marginal load may or may not be subject to the exercise of demand management. A hypothetical example is that a user decides to expose the top 10 or 20% of its demand profile to half-hourly spot price as the cost of firm contracting for this margin of load - eg by swap-equivalent or cap-equivalent purchase - maybe assessed by the user, to be more costly than simply taking “spot risk” on this margin of load.
- In short, spot price exposure is not deemed as a qualifying source meaning that a marginal spot exposure procurement model, in fact used by a number of large users currently, will not be open to them if they are to comply with the NEG during a period in which the reliability obligation is triggered. That is, the requirement to *cover the entire load / load up to peak demand* could mitigate against one of the main objectives of the NEG which is to lower prices for consumers rather than increase them

### **Impact of obligation to secure qualifying contracts on contract prices and wholesale competitive landscape**

- The reliability obligation to have qualifying contracts in place to represent peak demand will undoubtedly increase demand for qualifying contracts (one would assume predominantly swap and cap contracts) inevitably leading to an increase in price for these commodities. Again, this will mitigate against one of the key objectives of the NEG - lower prices for consumers.
- Additionally, east coast electricity markets have relatively few participants, both physical and financial, and our electricity markets are unquestionably highly concentrated relative to many other developed and far less liquid than efficiently-functioning markets around the world. In this context Visy is concerned that the obligation to secure qualifying contracts for the full spectrum of demand may lead to an increase in market power of certain participants who are in a better position to offer a broad range of contracts/from their broad portfolios - compare to smaller players (eg Tier 2 and Tier 3 retailers) who will not have these same options and maybe placed at a competitive disadvantage to Tier 1 participants - while this may not necessarily negatively affect the competitive landscape of physical and financial electricity markets, Visy's view is that there is a significant risk that it will. It is also not clear to Visy that the proposed Market Liquidity Obligation will appropriately deal with this risk as the Paper seems to imply.

### Load exemption for small retailers

- The Paper proposes an exemption for the first 50GWh of load for small retailers
- This exemption should equally apply to the first 50GWh of load for large users

### Qualifying contracts – Physical Generation firmness risk

- Physical Generation (or contracts to supply generation, as opposed to financial contracts) will normally be subject to unplanned outages due to technical issues (even when the generator has exercised good engineering practice) or due to factors outside of the control of the generator including force majeure related events. These outages can occur at any time and it is simply not possible for any form of physical supply to warrant 100% reliability.
- Despite the suggestion of a “firmness factor” it is still very unclear how physical generation subject to these kinds of risk would be treated and ultimately classified.
- The primary criterion for contract / supply qualification appears to be the ability to be available during times of high spot price (as a measure of market or system constraint) but the reality is that all supplies of a *physical* nature are subject to unplanned outage risk *at any time*, whether this is within the generator’s control or not (eg gas supply to a gas-fired generator has failed to supply due to an upstream gas infrastructure issue which is totally outside the control of the generator and is a rare event in a historical context).
- Beyond the growing segment of intermittent renewable energy whose output naturally varies depending on weather and other factors some level of non-firmness also obviously applies to conventional thermal sources of generation such as base-load coal and gas generation
- It is also important to re-inforce that not all contracts for purchase of electricity are financial in nature. Contracts with base-load generators which are subject to force majeure-related outages, or even unplanned outages within the control of the generator, are certainly not uncommon in the industry. The Paper seems to assume that only integrated retailers will have to contemplate the “firmness” of their physical generation but as other parties can procure energy on a non-firm physical basis (rather than a financial basis) as a means of reducing cost, this issue applies to other parties also.
- It should also be noted that the unplanned outage of a base-load generator may not be material in the context of system reliability. For example, it may well be the case in a large number of instances (if not the majority) that unplanned outages of generation are not coincident with times of reliability risk for the system generally, when supply is generally constrained, or when spot prices are high. It maybe likely that the outage of very large sources of generation (eg an entire coal-fired station output) could materially affect reliability but in many other cases where the generator is of a smaller scale, it is clearly not a given that outages would likely be co-incident with system unreliability (unless the outage is due to a broader issue affecting multiple parties – eg upstream Natural Gas infrastructure problems or key high voltage lines to which many generators are connected).
- Visy sees the “firmness factor” approach as not fleshed out in any sufficient detail and is subject to significant uncertainty in that firmness could be assessed differently depending on a particular view of the physical source. The Paper suggests an independent / external auditor be used to assess firmness but again, an independent auditor viewing the generation source through its own particular lens, may come to a very different assessment of firmness than the person procuring the physical generation. In addition the need to engage an auditor will result



**FOR A BETTER WORLD**

Level 11, 2 Southbank Blvd, Southbank Australia  
Phone +61 3 9247 4777 Facsimile +61 3 9247 4747  
Visy Industries Australia Pty Ltd ABN 74 004 337 615

[www.visy.com.au](http://www.visy.com.au)

in more administration and complexity for the liable user / party and ultimately result in more costs for the user.

- A clearer approach needs to be adopted to enable parties with physical generation or parties procuring physical generation to be able to assess the qualification of their supply arrangement with much greater certainty. This should not be something that an auditor may ultimately unilaterally determine after the Reliability Obligation is triggered, placing the generator or off-taker in a very uncertain position.

## Emissions Guarantee

### EITE Assistance

- As a heavily trade-exposed manufacturer which sells a large volume of its products into highly liquid global commodity markets, Visy cannot pass cost increases through to export customers. In this context, Visy strongly agrees with the need to apply EITE assistance using the framework adopted under the Carbon Pricing Mechanism and then applied in the context of indirect liabilities under the LRET and SRES.
- Administrative simplicity of the EITE mechanism is crucial so that compliance costs do not become significant – in this context, care should be taken to ensure that the mechanism to apply EITE assistance is streamlined with the EITE process in respect of LRET and SRES.

### **LRET & the Emissions Guarantee**

- Visy strongly supports the position that renewable plant eligible for credit under the LRET also be eligible to provide Emissions Guarantee-compliant supply.

Yours sincerely,

**(Royce De Sousa)**

General Manager – Energy & Sustainability, Visy Industries Australia