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Submissions
WAG Chair

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22 November 2016

Submission: Instantaneous Reserve Event Charge and Cost Allocation paper

Thank you for the opportunity to comment on the WAG discussion paper dated 11 October 2016.

It is EnerNOC's view that the incentives and IR costs should be better aligned with the causers or risk setters in the market by including more separation of the costs associated with each risk.

A long term solution for IR cost allocation should be derived from first principles. EnerNOC believes that the following principles should be applied:

- The IR costs should be allocated to the identifiable causer of the need for the reserve,
- IR cost should be allocated based on the identified risk that the reserve being procured is covering,
- The full cost of IR procurement including the HVDC costs should be delivered in each trading period to deliver the best possible marginal price signal.

It is important to separate the IR costs that are relevant to the risk, viz:

- In each Island,
- When reserve is shared across the HVDC,
- When the HVDC requires reserve to be procured in the receiving Island.

In separating these three costs, they can be allocated to the fundamental causers of those risks.

The present Island based approach to identifying the causers as the North and South Island generators above a 60MW de-minimis and the HVDC above its self-insurance level is not robust enough to provide long term benefits.

EnerNOC believes that a new class of causer is required and that is a HVDC causer. The HVDC causer could be identified as all generation above a de-minimis of 1MW in the sending Island. As the WAG paper has proposed, there is little point in passing the cost from the operation of the HVDC to Transpower as they do not have any operational control of the power flows on the HVDC. By passing these costs onto the HVDC to be allocated under the TPM, the marginal price signal is not just blunted, in EnerNOC's opinion it is lost completely from the market through the aggregation with other TPM based HVDC costs.

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The flows over the HVDC are a direct result of the interaction and optimisation of the energy and reserve offers in both Islands and the prices that result from those offers. If the sender of the next MW over the HVDC is exposed to an increase in reserve cost (from the transmission of that MW over the HVDC for example due to moving into a new price tranche), then they are the ones best placed to include that additional portfolio cost in their energy offer. Aligning the marginal cost of additional reserve directly with energy offers provides a true marginal price signal.

Competitive price signals will drive efficient market outcomes. Therefore, the most effective participants to pass the HVDC direct IR costs onto are the generators in the sending Island and this should lead to the most efficient solution for all consumers.

EnerNOC ranks the five presented NMIR cost allocation options in the discussion paper as follows:

Ranking	Cost allocation option	Comment
1	5) Cost to HVDC then to AC Island causer	We believe that this is the most economically efficient approach. It could be significantly enhanced by passing the IR costs caused by the HVDC directly back to the sending Island generators. With this addition, all IR costs for each type of risk should be allocated as a marginal cost per trading period.
2	2) National allocation	If the HVDC costs cannot be allocated as a marginal cost signal then this national approach is the next best market direction for efficient operation for the HVDC. The sending Island will receive some cost allocation from the reserve procured in the receiving island to support the flow over the HVDC.
3	4) Factored by HVDC reserve sharing limits	While this approach is a good starting point, it dilutes the price signal for the operation of the HVDC as both the generator within the Island risk costs and the HVDC risk cost are included in the one pro-rata allocation. We prefer to see the separation and allocation of each risk type that is present in our ranking of option 5.
4	3) Cost to Island causer	This allocation method appears to give a rather fixed cost for IR to the South Island, independent of the HVDC operation. In fact, the direct cost to the South Island appears to go down in relationship to the use of the HVDC. Our view is that this approach will not provide meaningful marginal pricing signals.

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5	1) Island based allocation	There are questionable incentives placed on participants from the present Island based IR cost allocation approach. It remains our view that it is only a matter of time and opportunity before perverse outcomes will be seen.

If it is decided to retain the event charge to maintain a reliability price signal to the causers of IR events, then it should be redistributed to all the providers of IR. Both the spinning reserve and Interruptible Load providers should receive in proportion to their delivery during the under frequency event, a share of the costs. This goes some way to rewarding the faster IL response in arresting the frequency fall during the event[1].

The *Review of the IR markets* project along with a possible new IR product design (ie Area under the Curve) for a single IR product should be given priority in the Electricity Authority's 2016/17 work programme[2]. EnerNOC is not satisfied that this project has received the robust discussion that this market design deserves if we are going to deliver long term benefits for all consumers in the procurement of IR.

Our response to the questionnaire is attached.

I would be very happy to provide further information or clarification, if it would be helpful.

Yours faithfully,

Stephen Drew
Manager, New Zealand

[1] Proposed Code Changes to amend the allocation of the event charge in subpart 3 of part 8 of the Code, EnerNOC, updated in March 2016

[2] Review of Instantaneous Reserve Markets Recommendations paper from WAG, January 2015

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Question		EnerNOC comment
Q1.	Do you agree with our identification of the problems with the current arrangements?	In general. The term sheet being developed for the WAG meeting#42 is better.
Q2.	Do you agree with these basic principles for allocating IR costs?	Yes
Q3.	Do you agree that continuing with island-based cost allocation after introduction of the NIRM is unlikely to create perverse incentives on parties to inefficiently withheld energy or IR capacity?	Yes
Q4.	What are your views on the merits of moving to a runway methodology?	Only if the annual benefit is shown to be larger and can justify such a change.
Q5.	Do you agree that a de minimis should continue and, if so, at what level?	A de minimis approach is needed. The level should be determined by changes to the risks on the system.
Q6.	Are there other cost allocation options that you think should be considered?	No
Q7.	Which option do you think sends price signals to underlying causers and the need for, and location of, IR to be procured in a manner which best meets the cost allocation principles of section 5?	Option 5, with the costs on the HVDC going to the sending Island generators.
Q8.	Do you think the choice of general cost allocation approach has a bearing on which option for cost allocation under the NIRM would be most appropriate?	No
Q9.	To what extent do you think the choice of best option is affected by the effectiveness of how costs allocated to the HVDC are passed-on to “underlying causers” of the level of energy transfer across the HVDC?	This is the key to the best cost allocation in the long term.
Q10.	Do you believe that some IR cost allocation options could materially impact on participants’ incentives to offer energy and IR to a degree that could have material outcomes on these markets?	Yes
Q11	If yes, which options are likely to give rise to such outcomes?	All the remaining proposed options, 1 to 4.

Q12.	Do you agree that HVDC-related IR costs should continue to be allocated to the HVDC owner and passed-on to market participants via the TPM, and do you have any observations about the interim allocation of IR costs under the NMIR?	No
Q13.	Do you think cost-allocation for commissioning plant should continue or change?	Remain the same
Q14.	Do you think a change to allocating costs to commissioning plant on a runway basis should only occur if general cost allocation were to move to a runway basis?	
Q15.	What cost-allocation approach do you think should apply for plant with under-frequency and voltage-fault-ride-through dispensations?	
Q16.	What measures do you think should be implemented to address small generation plant that are currently excluded from the need to comply with frequency-related AOPOs?	
Q17.	Do you think the event charge should be retained, and if so, on what basis?	Retaining the event charge can provide an additional commercial driver towards plant reliability.