

21 October 2014

Independent Market Operator
Attention Group Manager, Development and Capacity
PO Box 7096, Cloisters Square
Perth WA 6850

IMO-ROAM 2014 Ancillary Service Standards and Requirements Study

Thank you for the opportunity to provide comment on this draft report. Overall it is a comprehensive assessment of ancillary service requirements for the SWIS and is forward looking. Perth Energy supports the overall approach of the document.

ROAM has noted that the Power System Operating Procedures are quite prescriptive in respect to what facilities can provide some ancillary services and that this may potentially restrict the use of emerging technologies, especially storage, from providing these services. Perth Energy notes that storage is gaining considerably more attention and that suitable technologies may become available for service in the SWIS in the not-too-distant future. For this reason, Perth Energy agrees with ROAM's recommendations which support the use of such technologies.

Perth Energy notes the potential cost reduction that may be achieved by allowing facilities which are providing load following (LFAS) to also be counted towards spinning reserve (SR) and load rejection reserve (LRR). As such this is supported. However, Perth Energy considers that System Management should carefully monitor those facilities that are providing both services to ensure that the provision of LFAS does not compromise the provision of SR or LRR. Similarly, Perth Energy supports the recommendation that the IMO continue to monitor other systems to identify whether additional ancillary services will be needed to accommodate changes in grid characteristics arising from changes in the generation mix.

ROAM has recommended that the dispatch interval time step be reduced thereby reducing the quantity of ancillary service support that is required. Perth Energy strongly supports moving towards a five minute dispatch interval and sees the reduction in ancillary service requirements as another strong point in favour of this development.

A number of ROAM's recommendations are aimed at simplifying ancillary service standards and Perth Energy supports these. Changes to eliminate overlaps in service provision are also supported.

ROAM has made recommendations in respect to the minimum size of black start facilities. Perth Energy sees this as a purely technical issue and defers to the assessment of System Management.

ROAM has indicated its support for System Management's proposed requirement that black start facilities should carry fuel stocks for 48 hours during a system black-out. Currently all three black start plants are capable of operation on natural gas and diesel. If the 48 hour requirement were to be applied to diesel fuelled operation then the ancillary service costs would have to rise substantially to cover the cost of additional fuel storage facilities and fuel stocks. The other recommendations in respect to black start services appear to be sound and Perth Energy supports these.

There is one error in Table 12.3 which describes facilities that currently provide black start services to the system. The Perth Energy Kwinana GT1 is shown as 30 MW with a footnote commenting that there are four 30 MW units at Kwinana Swift, however, System Management only use a single unit in the system restart scenario. This is incorrect. The black start contract for this station is for the full 120 MW capacity and Perth Energy is required to ensure that this full capacity is available to System Management at all times.

Should you have any questions in respect to this response please do not hesitate to contact me.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Ky Cao', with a large, sweeping loop at the end.

Ky Cao

Managing Director