

## Change to Frequency Keeping selection methodology post MSP go-live

<b>Summary</b>	Two hours prior to the go-live of MSP (the System Operator's Market Systems Project), the System Operator will revert back to the offer based merit-order selection methodology. This method was previously used for frequency keeper selection prior to 3 <sup>rd</sup> June 2008.
<b>Procurement Arrangements</b>	There will be no change to the normal market arrangements for the procurement of frequency keeping services by the System Operator following the go live of MSP.
<b>Method used prior to MSP go-live</b>	The System Operator selects the frequency keeper based on a least cost basis. This is done by using the market offer for frequency keeping and an estimation of the associated constrained-on cost of moving a provider to 'centre-of-band' <sup>1</sup> .
<b>Method used post MSP go-live</b>	From 2 hours before MSP go live the System Operator will procure frequency keeping for each island on the basis of the cheapest market offer for frequency keeping. It will not take into account any estimation of the associated constrained-on cost or the constrained-off cost that may be incurred as a result of the provision of frequency keeping from any given provider.
<b>Why is this change necessary?</b>	<p>The reason for the change to the System Operator's selection methodology is to align it with how the MSP frequency keeping selection software was designed.</p> <p>The System Operator has commenced a project to reintroduce the current frequency keeping selection methodology into the new MSP environment.</p>
<b>Post MSP Examples</b>	<p>The following scenarios are based on hypothetical offers from various fictional providers and traders. The selection is consistent with the selection methodology that will be used under MSP is highlighted in green.</p>

### Example 1

Station	Trader	Frequency Keeping Offer	Offered Band (+/-)	Trading Period offer effective for	System Operator Band Requirement: +/- 50 MW	Island
X	A	2000	50	1	50	NI
Y	B	2500	50	1	50	NI
Z	C	50	20	1	50	NI

### Example 2

Station	Trader	Frequency Keeping Offer	Offered Band (+/-)	Trading Period offer effective for	System Operator Band Requirement: +/- 50 MW	Island
X	A	2000	50	1	50	NI
Y	A	2500	50	1	50	NI
Z	A	1000	20	1	50	NI
ZZ	A	900	30	1	50	NI

### Example 3

Station	Trader	Frequency Keeping Offer	Offered Band (+/-)	Trading Period offer effective for	System Operator Band Requirement: +/- 50 MW	Island
X	A	2000	50	1	50	NI
Y	B	900	40	1	50	NI
Z	B	1000	20	1	50	NI

### Example 4

Station	Trader	Frequency Keeping Offer	Offered Band (+/-)	Trading Period offer effective for	System Operator Band Requirement: +/- 50 MW	Island
X	A	2000	50	1	50	NI
Y	B	2500	50	1	50	NI
Z	B	1000	20	1	50	NI
ZZ	A	900	30	1	50	NI

<sup>1</sup> 'Centre-of-band' is the minimum set point on a generator that will allow the generator full frequency responsive range across the entire frequency band (+/- 50 offered MW band from set point)