

## Bid assessment/Work program substitution Policy

The work program valuation methodology used will vary from basin to basin and bid round to bid round, depending on the featured prospectivity issues. The specific methodology to be used to select winning bidders will be publicised at the time the areas are gazetted.

However, in general the following may be used as a guide.

### *Wells*

Wells are firstly given a score of according to their proposed target horizons:

Target 1	1.0
Target 2	1.0
Target 3	1.0

Where the bidder has not indicated a target, the well is given a score of one. Multiple target wells increment scores based on the targets intercepted e.g. a well that will test both targets 1 and 2 will score 2, a well that will test both target 1 and the 'intra-basement' target will score 1.2. A maximum score of 3.2 is therefore possible for a multi target well in this example.

The well score is then discounted to account for timing using standard discount factors for guaranteed and non-guaranteed wells, (where the bid has not been 'loaded' with non-guaranteed activity – see below).

**Table 1: Discount factors for guaranteed and non-guaranteed wells**

Year	Guaranteed well	Non-guaranteed well
1	1	1
2	0.9	0.45
3	0.8	0.4
4	0.7	0.35
5	0.6	0.3

Where any non-guaranteed drilling for either year 4 and/or 5 exceeds the total guaranteed drilling program, a sliding scale of additional discount factors is applied. This reduces the effect of an applicant loading bids with non-guaranteed wells in years 4 and 5.

**Table 2: Discount factors where non guaranteed program exceeds twice guaranteed program**

Non-guaranteed year	$Ng \geq 2 \times g$	$Ng \geq 3 \times g$	$Ng \geq 4 \times g$	$Ng \geq 5 \times g$
4	0.3	0.15	0.075	0.04
5	0.25	0.125	0.06	0.03

**Where g = guaranteed program, ng = non-guaranteed program**

In frontier blocks, where it is considered that a minimum amount of seismic per well is required to located prospect, wells that do not appear to be supported by sufficient seismic per proposed well (e.g. 200km 2D seismic per well) will result in those wells being discounted.

**The resulting score = total well score (weq)**

### **Seismic**

Assessment of seismic surveys reflects the value of seismic compared to drilling and also the greater value of 3D surveys relative to 2D surveys. In this case, the value of 3D seismic is equated to that of drilling a well.

The value of each seismic survey is discounted using the following cost factors:

*Table 3: Seismic surveys and cost factors*

<b>Seismic survey type</b>	<b>Seismic cost factor</b>
<b>2D</b>	<b>0.2</b>
<b>3D</b>	<b>1.0</b>

A standard well equivalent cost is assumed for the area (e.g. A\$1,000,000), and this is used to convert the discounted seismic value into WEQs:

The seismic survey score (weq) = (cost of seismic survey × seismic cost factor)/1,000,000

The seismic survey WEQ scores are then further discounted using the factors in Table 1 and also Table 2 where any non-guaranteed seismic for either year 4 or year 4 and 5 exceeds the total guaranteed seismic.

The sum of all discounted seismic survey scores = **total seismic score (weq)**

### **Other data acquisition**

Other data acquisition includes seismic reprocessing, geological and geophysical studies, aeromagnetic surveys, geochemical surveys etc. Each of these activities will have the following cost discount factors applied:

*Table 4: Discount factors for other data acquisition*

<b>Type of work</b>	<b>Cost discount factor</b>
<b>Seismic reprocessing</b>	<b>0.05</b>
<b>Aeromagnetic survey</b>	<b>0.02</b>
<b>Geological &amp; Geophysical studies</b>	<b>0.05</b>
<b>Geochemical survey</b>	<b>0.01</b>

**The activity score (weq) = (cost of work × cost factor)/1,000,000**

The other data acquisition WEQ scores are then further discounted using the factors in Table 1 and also Table 2 where any non-guaranteed work for either year 4 or year 4 and 5 exceeds the total guaranteed work.

**The sum of all discounted activity scores = total acquisition & reprocessing score (weq).**

## Scoring

Total bid score (weq) = total well score + total seismic score + total acquisition & reprocessing score

Two situations may arise at this point either there is a clear winner (ie bid > 1 weq from the nearest other bidder or the two highest bids are regarded as similar (within 1 weq of each other).

### ***Clear winner (difference in bids > 1 weq)***

Total bid scores for each bid will be ranked by the BAT. Where there is a clear winning bid, the Director Petroleum will be informed and will ask the BRT to initiate financial checks.

### ***Similar bids (difference in bids $\leq$ 1 weq)***

Similar bids are defined as those where total scores are within  $\pm 1$  weq for a block. If similar bids cannot be separated by financial assessment and/or, preference given to the bidder who is a "new player" (see below), extra criteria will be applied by the BAT:

the bidder with the highest number of guaranteed wells will be recommended the winner, however, if the number of guaranteed wells are also the same, then the bidder with the higher amount of guaranteed 3D seismic will be recommended the winner, however, if bids are still equal after these tests are applied, then the amount of guaranteed 2D seismic and non guaranteed wells and seismic will be used to separate bids.

The BAT will then inform the BRT of the winning bids.

### ***Financial resources assessment***

Checks on the financial status of the highest ranking applicants are undertaken, with the applicants being classified as "adequate", "marginal", or "inadequate". The financial assessment includes both other licence commitments in SA (or if more than one block is to be offered to an applicant, the commitments in all blocks) and the previous performance in meeting work program commitments (including a new company with a Director of a previously poor performing company). If the applicant is classified as "inadequate", a report on the likelihood that the capital may be raised, and/or that the work program may be fulfilled is also included. The BRT reports to the BAT on the bidders status.

The BAT makes a recommendation to the Director. Any applicant whose status is classified as "inadequate" may be excluded from being offered the licence, and the second highest bidder may be considered. However, if the company is the only bidder for the block and their financial status is classified as "inadequate", the block may be offered if there is a reasonable likelihood that the capital may be raised, and that the work program may be fulfilled.

## APPENDIX - Example Bid Assessment

Attached are hypothetical example score sheets for a single block with 3 bidders. The well cost equivalent for seismic is assumed to be \$1 million, and the area has sufficient seismic to locate wells adequately. However seismic will assist (particularly 3D) in lowering the risk associated with drilling.

In summary, the scores are:

<b>Bidder</b>	<b>Guar Wells</b>	<b>Non- guar wells</b>	<b>Non- guar wells</b>	<b>Total Seismic</b>	<b>Total WEQ</b>	<b>Financial Rating</b>
A	2	1	3	115km <sup>2</sup> 3D	4.41	Marginal
B	3	1	4	85 km 2D	5.01	Inadequate
C	1	4	5	150 km 2D	1.92	Adequate

In this example bidder C is not a contender as its weq score is significantly lower than that of A or B, in spite of proposing more wells and seismic. The bid has been heavily discounted due to apparent loading of the non guaranteed program, and the late timing of well drilling.

Bidders A and B are within  $\pm 1$  weq and are therefore similar bids, but bidder A has better financial resources, and therefore would be declared the winner. If both A and B bidders were judged to have adequate financial resources, then bidder B would be declared the winner based on the greater number of guaranteed wells.

## BID A

### WORK PROGRAM BID SUMMARY:

#### WORK PROGRAM YEAR

	1	2	3	4	5
GUARANTEED	Y	Y	Y	N	N
<b>NUMBER OF WELLS</b>		<b>1</b>	<b>1</b>		<b>1</b>
WELL TARGET SCORE		2	2		2
SEISMIC - 2D (KM)					
COST - 2D (\$K)					
SEISMIC - 3D (KM2)				115	
COST - 3D (\$K)			1,150		
SEISMIC REPR (\$K)					
GEOL & GEOPH (\$K)		200			

### WORK PROGRAM SCORE SUMMARY:

#### WORK PROGRAM YEAR

	1	2	3	4	5
WELL TD SCORE	2	2		2	
TIMING & GUARANTEE SCORE	0.9		0.8		0.3
<b>TOTAL WELL SCORE</b>	<b>1.8</b>		<b>1.6</b>		<b>0.6</b>
SEISMIC SURVEY SCORE					1.15
TIMING & GUARANTEE SCORE					0.35
<b>TOTAL SEISMIC SCORE</b>				<b>0.4025</b>	
OTHER DATA ACTIVITY SCORE		0.01			
TIMING & GUARANTEE SCORE		1.0			
<b>TOTAL OTHER DATA SCORE</b>	<b>0.01</b>				

**TOTAL BID A SCORE = 4.41**

## BID B

### WORK PROGRAM BID SUMMARY:

#### WORK PROGRAM YEAR

	1	2	3	4	5
GUARANTEED	Y	Y	Y	N	N
NUMBER OF WELLS		1	1	1	1
WELL TARGET SCORE	2	2	1	1	
SEISMIC - 2D (KM)	85				
COST - 2D (\$K)	250				
SEISMIC - 3D (KM2)					
COST - 3D (\$K)					
SEISMIC REPR (\$K)					
GEOL & GEOPH (\$K)		200			

### WORK PROGRAM SCORE SUMMARY:

#### WORK PROGRAM YEAR

	1	2	3	4	5
WELL TD SCORE	2	2	1	1	
TIMING & GUARANTEE SCORE	1.0	0.9	0.8	0.35	
<b>TOTAL WELL SCORE</b>	<b>2.0</b>	<b>1.8</b>	<b>0.8</b>	<b>0.35</b>	
SEISMIC SURVEY SCORE		0.05			
TIMING & GUARANTEE SCORE		1.0			
<b>TOTAL SEISMIC SCORE</b>		<b>0.05</b>			
OTHER DATA ACTIVITY SCORE		0.01			
TIMING & GUARANTEE SCORE		1.0			
<b>TOTAL OTHER DATA SCORE</b>		<b>0.01</b>			

**TOTAL BID B SCORE = 5.01**

## BIDDER C

### WORK PROGRAM BID SUMMARY:

#### WORK PROGRAM YEAR

	1	2	3	4	5
GUARANTEED	Y	Y	Y	N	N
NUMBER OF WELLS			1	2	2
WELL TARGET SCORE			2	1	2
SEISMIC - 2D (KM)		150			
COST - 2D (\$K)		450			
SEISMIC - 3D (KM2)					
COST - 3D (\$K)					
SEISMIC REPR (\$K)	100	100			
GEOL & GEOPH (\$K)	200	200	200	200	200

### WORK PROGRAM SCORE SUMMARY:

#### WORK PROGRAM YEAR

	1	2	3	4	5
WELL TD SCORE			2	1	2
TIMING & GUARANTEE SCORE			0.8	0.075	0.06
TOTAL WELL SCORE			0.8	0.075	0.12
SEISMIC SURVEY SCORE		0.09			
TIMING & GUARANTEE SCORE		0.9			
TOTAL SEISMIC SCORE		0.081			
OTHER DATA ACTIVITY SCORE	0.015	0.015	0.01	0.01	0.01
TIMING & GUARANTEE SCORE	1.0	0.9	0.8	0.35	0.3
TOTAL OTHER DATA SCORE	0.015	0.135	0.008	0.0035	0.003

**TOTAL BID C SCORE 1.91**