

1 Q. How have runner replacements on Bay d'Espoir units 1 - 6 improved:

2 1. reliability?

3 2. efficiency?

4 3. environmental performance?

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7 A. 1. Reliability

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9 Prior to the replacement of the runners frequent problems that
10 occurred that affected the reliability of the units included:

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12 a) Galvanic corrosion/cavitation of the runner components.

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14 b) Failure of the bolts securing the stationary primary
15 wearing rings in the headcover and discharge ring.

16

17 c) Cracking of the runner blades.

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19 Since the replacement of the runners all these problems have been
20 eliminated and to date there has been no need for any runner repairs.

21

22 2. Efficiency

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24 As outlined in the evidence of R. J. Henderson, page 4 lines 10 to 16,
25 there has been a 2.8% increase in unit efficiency.

26

1 3. Environmental Performance

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3 The runner replacements were undertaken primarily for reliability and
4 efficiency improvements. However, some environmental benefits
5 have been noted.

6

7 a) The change in efficiency and increase in production will result
8 in less production at Holyrood and thereby reduce emissions
9 from that plant.

10

11 b) During replacement of the runners the main wicket gate
12 bushings were replaced with self lubricating type bushings
13 eliminating the possibility of grease being released to the
14 environment.