

1 Q. **Reference: Schedule 1 – Upgrade Report – Penstock 1 Life Extension – Bay d'Espoir.**

2 The Application discusses in Appendix M, page 66 of 219, two weld procedures for full
3 penetration welds; one for a repair and the other for the new 17' replacement portion of
4 Penstock 1. The first involves backgouging while the second uses a backing plate. Please explain
5 why the two methods are employed?

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8 A. For the repair weld, one side is prepared by removing the existing weld to half depth and a new
9 weld is installed for half the thickness of the existing plate, using the remaining half of the
10 existing material as the backing. The other side is then back gouged to remove the remaining old
11 weld material and a new repair weld is installed to complete the full penetration weld. A backing
12 plate is not required as existing material is used on both sides. For the welding of new plate
13 sections, a backing plate is needed to contain the material during the welding process on one
14 side, as there will be a small gap present before the plates are joined.