

1 **Q. In reference to the Lockston Rehabilitation (PUB 3.1, Attachment “A”), the**
2 **estimated levelized costs over the next twenty-five years is 5.4 cents per kWh. Please**
3 **compare this with the short run marginal costs at the Holyrood Thermal Generating**
4 **Station. Further, please provide the complete calculation, on a year by year basis, of**
5 **the levelized cost estimate from the Lockston Plant over the 25 year period.**
6

7 A. The Company’s response to PUB 3.1, Attachment A (1st Revision) provides a full
8 justification of this project based on the levelized cost of 4.94 cents per kWh and a
9 comparison to a 25 year forecast of the short run marginal costs of energy at the
10 Holyrood Thermal Generating Station as well as other unit cost comparisons. The
11 analysis conducted for this report takes a long term view of the benefits and costs
12 associated with this facility.
13

14 The forecast of short run marginal costs at Holyrood provided in the Lockston analysis
15 considers only fuel and variable operating and maintenance costs. These costs only
16 reflect the cost of producing energy and do not include the cost of providing capacity
17 within the power system. Both need to be considered in determining the benefit of
18 continued operation of the Lockston Plant. It is more appropriate to compare the
19 Lockston plant’s rehabilitation costs with benchmarks such as the cost of the Rose
20 Blanche project or the pricing structure of non-utility generator contracts that add to both
21 the capacity and energy capability of the system. The fact that the facility’s long term
22 costs are lower than the forecast of short run costs at Holyrood (5.53 cents/kWh) clearly
23 demonstrates that the plant’s continued operation is beneficial to customers.
24

25 The attached table presents the complete calculation of the Lockston levelized cost of
26 energy. Columns A and B contain the escalated capital costs of each of the capital
27 projects considered in the study, entered by the year in which each project is undertaken.
28 Column A contains the projects subject to a 4% CCA rate while Column B contains the
29 projects that are eligible for accelerated CCA treatment (under Class 43.1). The
30 combined annual capital revenue requirement of these projects is provided in Column C,
31 assuming a depreciation rate of 2.03%. Column D contains the annual operating costs of
32 the facility, escalated annually at a rate of 2%. Column E is the sum of Columns C and
33 D, by year. Column F is the present worth of each of these annual totals, using a discount
34 rate of 6.52% (the estimated after tax cost of capital for this analysis). Column G
35 provides the cumulative totals of the annual present worth. The cumulative total in Year
36 25 (2028) represents the NPV of the costs associated with this facility. The annual series
37 is then levelized, and divided by the levelized normal production to give the 4.94
38 cents/kWh result.