

EXHIBIT GH-1

Cost of Replacement Water

Prepared For: Prefile testimony of Jon R. Stack, S.T. Engineering
Regarding the proposed Cross Cascade Pipeline by Olympic Pipeline

Sponsor: Cross Valley Water District

Date: February 12, 1999

Issue: Cost of Replacement Water

Estimated Cost of Replacement Water:

Well water cost:

Use Well 6 as an example:

Flow = 450 gpm = 158,102 ccf per year at 12 hour per day pumping rate.

Estimated replacement cost = \$200,000 = \$14,520 per year at 6% interest for 30 years.

Estimated power cost = \$6,000 per year

Estimated maintenance cost = \$4,000 per year

Total yearly estimated cost = \$24,520. \$24,520 per 158,102 ccf = **\$0.16 per ccf**

Clearview Project water cost:

Everett wholesale water rate = \$0.50 per ccf

Flow = 6 MGD = 2,927,807 ccf per year

Use 0.2% of pipeline value for estimated yearly operation and maintenance cost

Use 0.2% of reservoir value for estimated yearly operation and maintenance cost

Use 2.0% of pump station value for estimated yearly operation and maintenance cost

Estimated pipeline value = \$4,442,237: O & M = \$8,884

Estimated reservoir value = \$1,021,849: O & M = \$2,044

Estimated pump station value = \$1,051,343: O & M = \$21,027

Estimated yearly power costs = \$156,839, Total yearly estimated cost = \$188,794

\$188,794 per 2,927,807 ccf = \$0.06 + \$0.50 = **\$0.56 per ccf**

Difference in cost of well water vs. Clearview Project water = \$0.56 - \$0.16 = **\$0.40/ccf**

Yearly cost at 4.6 MGD = \$0.40/ccf x 2,244,652 ccf = **\$897,861**