

State Tax Commission February 22, 2011 Tip - Topic: Fluid Pipeline Reporting (Part 2)



Dear STaCy,

While processing my personal property statements I have discovered that a fluid pipeline company has requested an obsolescence allowance for under-utilization. They have computed the claimed under-utilization by dividing the actual throughput of crude oil that passed through the pipeline during the past year by the design capacity of the pipeline and then taking that ratio to the power of .65. They don't explain why they take the ratio to the power of .65, but they call the result a "utilization factor," and multiply it by the true cash value derived from applying the Table K valuation multipliers. The result is an assessed value which is approximately one-third of what it would be if the allowance is not applied. They have not completed Form 3589. **My second question is whether this a correct method of calculating obsolescence?**

Sincerely,
Pipeline Pete

Dear Pete,

In answer to your second question, although STaCy has verified the math, even the "power of .65" part, it isn't apparent why these mathematical operations might be useful in establishing the under-utilization of a pipeline. First, STaCy has no idea why the ratio was taken to the power of .65. Further, STaCy does not believe that starting with a ratio which compares a pipeline's actual throughput and its design capacity provides a sound basis either for determining the amount of under-utilization or for measuring the amount of loss of value through obsolescence.

Design capacity rarely is an accurate measurement of the maximum practical level of utilization. Typically, pipelines cannot be operated continually at design capacity, for a number of reasons. Flow must be reduced for inspection and repair, accidents disrupt production and, most importantly, the design must be capable of accommodating peak utilization periods, such as seasonal increases in demand or variations in supply. Measuring full utilization requires a detailed analysis of the effect of those factors which disrupt throughput, and of the maximum needed capacity, in an effort to arrive at an effective capacity. Further, a determination must be made whether the design specifications were established based on expected future needs. If the design capacity is predicated on the expectation of an increased need for capacity in the future, then excess capacity is not obsolescence, so long as that expectation of future need is still reasonable.

Second, developing a utilization ratio for valuation purposes by comparing the actual throughput of the pipeline with even the effective capacity of the pipeline is an invalid method of calculating the amount of obsolescence, for the reason that although a smaller pipeline would likely cost somewhat less, it is unreasonable to assume the differences in construction costs for the two pipelines bear a direct and proportional relationship to each other. Even if a smaller pipeline was built, many of the construction costs would be similar to those of a larger pipeline, or at least would not decline by a linear amount which directly tracks the ratio between actual throughput and effective capacity. Instead the measure of super-adequacy obsolescence is the difference between the reproduction cost of the actual pipeline and the reproduction cost of a pipeline which could be build to handle the actual needed throughput, less depreciation which has already occurred, plus the capitalized annual increased operating costs, if any, for the larger pipeline.

Sincerely,
STaCy