Oil and Gas Price Forecast per Property Tax Code Section 23.175

TAX YEAR 2016

Per SB 1985 (84th regular session of the Texas legislature), Section 23.175 of the Property Tax Code was amended beginning tax year 2016 so that the forecasted oil and gas price scenario used in ad valorem tax discounted cashflow appraisals will be derived in the following manner:

1. The forecasted price for Year 1, if any, is equal to last year's average monthly price multiplied by a "Price Adjustment Factor" (PAF). This PAF is equal to the percentage increase or decrease projected for oil and gas prices for the next calendar year, compared to last year's average prices, by the United States Energy Information Administration (EIA) in their most recent *Annual Energy Outlook* ("Early Release" version). There is one PAF calculated for oil and one PAF calculated for natural gas, based on the EIA's price projection for "West Texas Intermediate Spot Average" (dollars per barrel) and "Henry Hub Spot" (dollars per million Btu), respectively. If the current year AEO is not published by March 1, the prices in the EIA's Short-Term Economic Outlook (STEO) as published in January of the current year will be used instead of the AEO to calculate the Price Adjustment Factor.

2. The forecasted prices for Years 2 through 6, if any, are derived by successively multiplying the calculated Year 1 price by an escalation factor which is equal to the average annual change in the Producer Price Index (PPI) for commodity data from 1982 to the most recent calendar year, as published by the United States Bureau of Labor Statistics (BLS). There is one factor calculated for oil and one factor calculated for gas. The Texas Comptroller is required to publish a manual that specifies the formula for this factor's calculation. This factor is an upper limit; the appraisal district can choose to use a smaller factor if or when appropriate.

The forecasted prices for any years in the cashflow past Year 6 are equal to the price used in Year 6.

	Oil	Gas	
a. Most Recent Previous Year's Price (EIA)[1]:	$48.67	$2.63	
b. Projected Next Year's Price (EIA):	$38.54	$2.65	
c. Calculated PAF for Year 1 Price:	0.79186	1.00760	= (b / a)
=	20.814% decline	0.760% escalation	
d. PPI Index in 1982 (BLS)[2]:	100.0	100.0	
e. PPI Index for Most Recent Previous Year (BLS):	130.4	106.3	
f. Years Elapsed from 1982:	33.00	33.00	
g. Calculated Factor for Years 2-6 Prices:	1.00808	1.00185	$= (e / d)^{(1/f)}$
=	0.808% escalation	0.185% escalation	

[1] EIA price data is for West Texas Intermediate (formerly called Imported Low-Sulfur Light Crude Oil by EIA) and Henry Hub Spot Price as published in EIA's "Reference Case" Table 12 (Petroleum Product Prices) and Table 13 (Natural Gas Supply, Disposition, and Prices), in nominal dollars per barrel and million btu, respectively. Alternatively, in years where the AEO is not used, these prices are from the EIA's January STEO publication, Table 2. The prices shown in rows a and b above have been rounded to two decimal places before calculation of the PAF in row c.

[2] BLS PPI data is for Domestic Crude Petroleum (commodity code 0561) and Natural Gas (commodity code 0531), non-seasonally adjusted, under the Fuels and Related Products and Power group (group 5).