Progressivity in CS HB 2001 (O&G) with requested alternative information

Dan E. Dickinson

November 2, 2007

House Resources

Progressivity Taxes

	PPT	ACES	HO&G
BASE			
Taxable bbls	244	244	244
ANS Market	87.00	87.00	87.00
Trans	7.00	7.00	7.00
GVPP	80.00	80.00	80.00
Lifting	20.00	20.00	-
PTV	60.00	60.00 GVPP:	80.00
bbls time $/bbl	14,640	14,640	19,520
Base	14,640	14,640	19,520
RATE (factor/dollar * dollars over starting point)			
Starting place	40.00	30.00	50.00
Price index	20.00	30.00	30.00
Factor/dollar	0.2500%	0.2000%	0.2250%
Prog Factor	5.00%	6.00%	6.75%
Tax = Rate * Base			
Tax	732.00	878.40	1,317.60

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Progressivity Taxes (using 10/30 Daily Price and DOR cost and volume assumptions)

	PPT	ACES	HO&G	
BASE				
Taxable bbls	230.5	230.5		230.5
ANS Market	89.09	89.09		89.09
Trans	6.73	6.73		6.73
GVPP	82.36	82.36		82.36
Lifting/Upstream	18.57	18.57		-
PTV	63.79	63.79	GVPP:	82.36
bbls time $/bbl	14,704	14,704		18,984
Base	14,704	14,704		18,984
RATE (factor/dollar * dollars over starting point)				
Starting place	40.00	30.00		50.00
Price index	23.79	33.79		32.36
Factor/dollar	0.2500%	0.2000%		0.2250%
Prog Factor	5.95%	6.76%		7.28%
Progressivity Tax = Progressivity Rate * Progressivity Base				
Tax	874.50	993.67		1,382.22
Original Tax	732.00	878.40		1,317.60
Delta (increase)	142.50	115.27		64.62

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Are costs closer to $15 or $20 a barrel?

	Alternative Calculations		Econ One
	No Royalty Effect	Removing Royalty	"All Details"
Opex - (in millions) (from DOR)	2,146	2,146	
Capex - (in millions) (from DOR)	2,137	2,137	
Total - $ numerator	4,283	4,283	4,264
Daily Volumes (millions) (from DOR)	0.722	0.722	
Days in year	365	365	
Annual Volumes (millions)	263.5	263.5	
Royalty Effect (estimate)	1	0.875	
Bbl Denominator	263.5	230.6	230.5
$/bbl	16.25	18.57	18.50

"Actual" costs 30 cents per barrel higher

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Progressivity Studies 10/28/07 ($7 downstream costs, $20 upstream)

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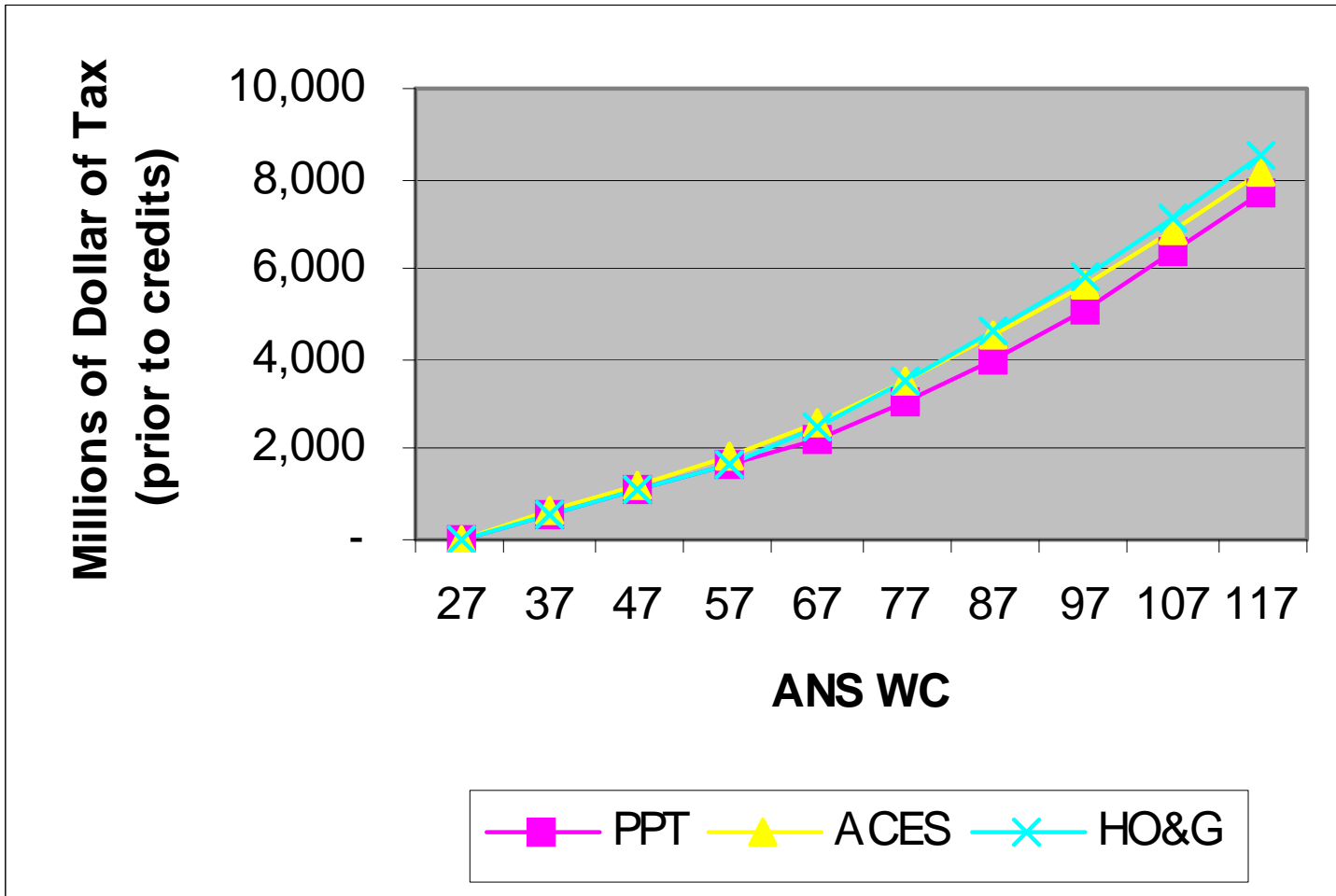
Cross Over Point, ACES and H O&G CS (using 10/30 Daily Price and DOR cost and volume assumptions)

MM $ Tax

Prior To Credits

ANS Price

Legend: ACES — H O&G CS
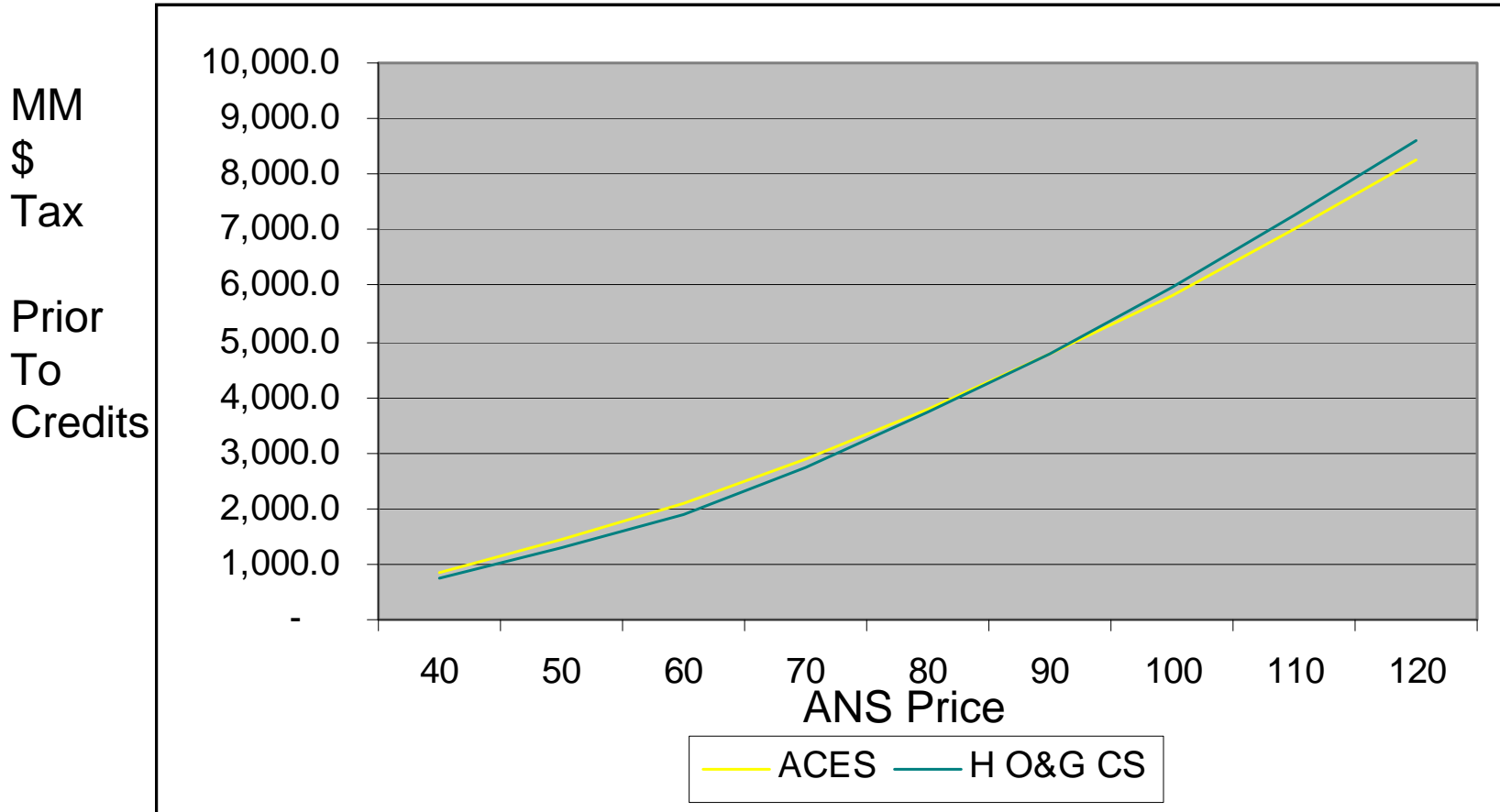
Cross Over Points (ANS price, millions of dollars of tax before credits) where HO&G CS revenues exceed ACES using different costs

Costs = 22=15+7

Costs = Upstream + Downstream

Costs =25.30=18.57+6.73

Costs = 27=20+7

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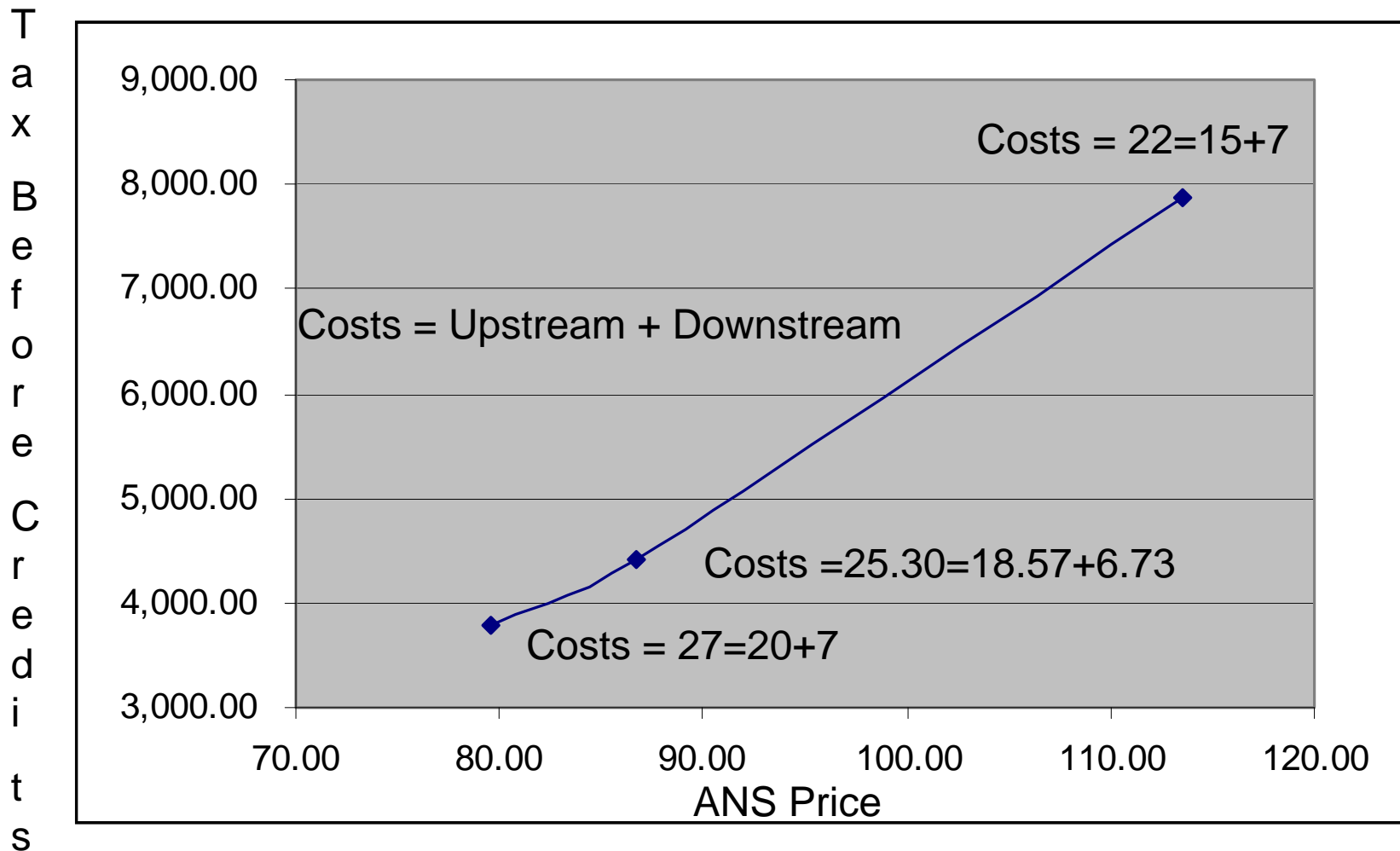
Algebraic Description of Progressivity

- R = Progressivity rate (per dollar per barrel above starting point)
- G = Gross Value at Point of Production of Taxable Oil
- N = Upstream Costs
- TB = Taxable Barrels
- <u>Gross Progressivity</u>
- Progressivity Tax = R * (G/TB - 50) * G
- <u>Net Progressivity</u> (ACES would use 30 instead of current 40)
- Progressivity Tax = R * ((G-N)/TB - 40) * (G-N)