

# THE FAIRBANKS PIPELINE COMPANY

## AN ALASKAN SOLUTION

No. 2

Capex, Volume and ROR Sensitivity Analysis

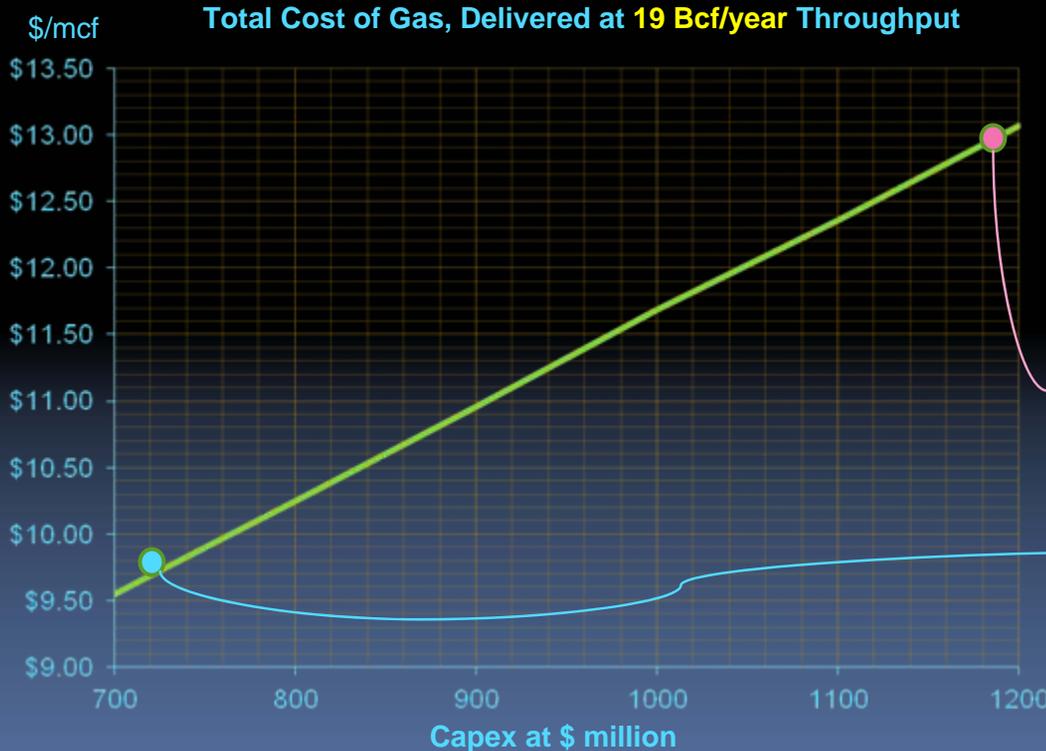
Presentation for the Fairbanks Banking and Accounting Community

1/11/11

# Sensitivity of Total Cost of Gas to FPC's Capex Estimate at 19 Bcf/Year

- As a comparative basis for FPC's Capex estimate, FPC sampled 21 FERC filings for pipelines completed in 2009. The range of costs on an inch-mile basis for roadside installed pipelines in the lower 48 was **\$72,000 to \$91,000**, ranging with region, total length, and diameter. Average length in sample was 248 miles, average diameter was 28". Typically, costs drop as a function of distance, smaller diameter & the CPI of the region
- The FPC 12" pipeline is estimated to cost \$716 million. At 508 miles in length, FPC's cost estimate is \$118,000 per inch-mile for its roadside installation
- In comparison, the AGDC 24" is estimated to cost \$3,450,000,000 less ROW and permits. At 737 miles in length, AGDC's cost estimate is \$195,000 per inch-mile for both roadside and cross country installation. So... let's play the devil's advocate below

## Case 1 - 12" all the Way



Energia Cura staff has estimated, managed and built three pipelines in Alaska. All three pipelines were constructed within estimate and on time. **But... what if Energia Cura's estimate of \$716 mm for the construction of the FPC pipeline is wrong?**

Then at its current basis for Case 1 at 19 Bcf/year and its current 12% standard rate of return, its total cost of gas **would increase from \$9.66 to \$12.99**

Crude is predicted to soon increase well beyond \$120/Bbl by 2014; the year FPC goes into operation. If it escalates to just \$113/Bbl by then, FPC's cost of \$12.99/mcf would still drop Interior's energy costs by more than half

● FPC's Capex at \$716 million, or \$118,000 per inch-mile

● FPC's Capex at AGDC's \$195,000 per inch-mile

# Sensitivity of Total Cost of Gas to FPC's Capex Estimate at 30 Bcf/Year

- Case 1 A represents the same stand alone 12" pipeline moving 30 Bcf/year instead of 19 Bcf/year
- Flows of 30 Bcf/year can be attained on FPC's system with the addition of Eielson AFB, Alyeska Pipeline & GVEA's second gas turbine addition at its North Pole Plant.

Again... what if Energia Cura's estimate of \$716 mm for the construction of the FPC pipeline is too low and we use AGDC's cost/inch-mile instead?

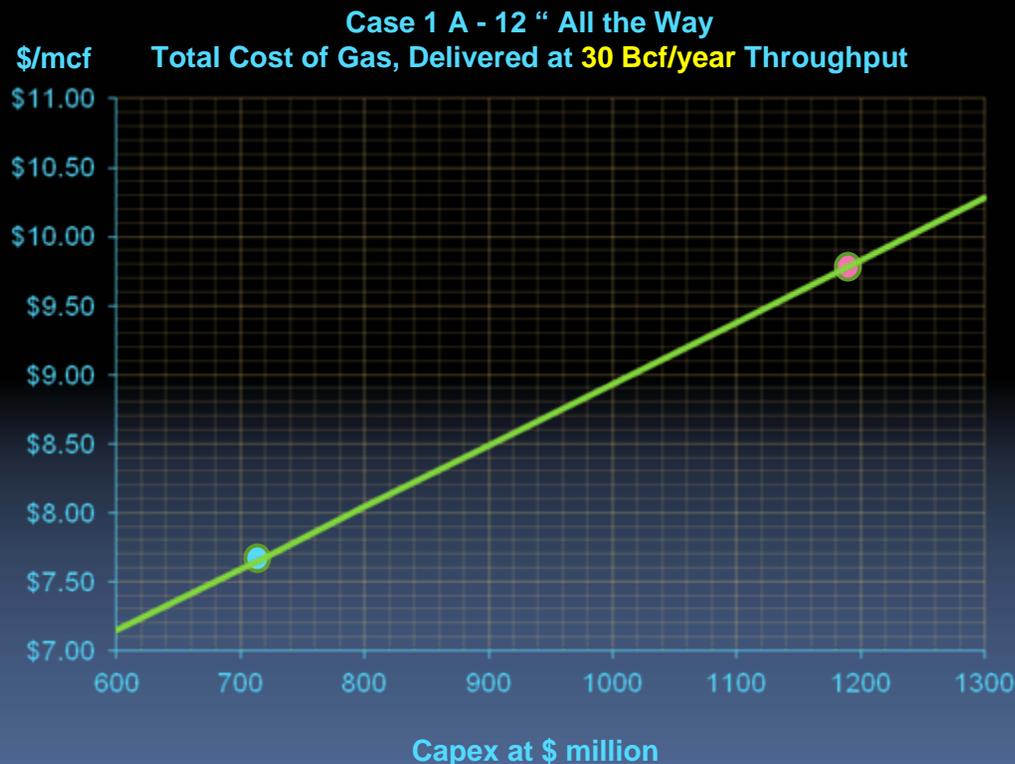
Then at its current basis for Case 1 at 30 Bcf/year and its current 12% standard rate of return, its total cost of gas would increase from \$7.65 to \$9.82

The economic cross over for delivering FPC's gas to the Interior at half today's costs now drops from \$113/Bbl crude in Case 1 (19 Bcf), to \$85.43/Bbl for Case 1 A's higher flow rates of 30 Bcf.

Even at its highest Capex cost, FPC would deliver gas at less than half at today's crude price > \$90

- FPC's Capex at \$716 million, or \$118,000 per inch-mile
- FPC's Capex at AGDC's \$195,000 per inch-mile

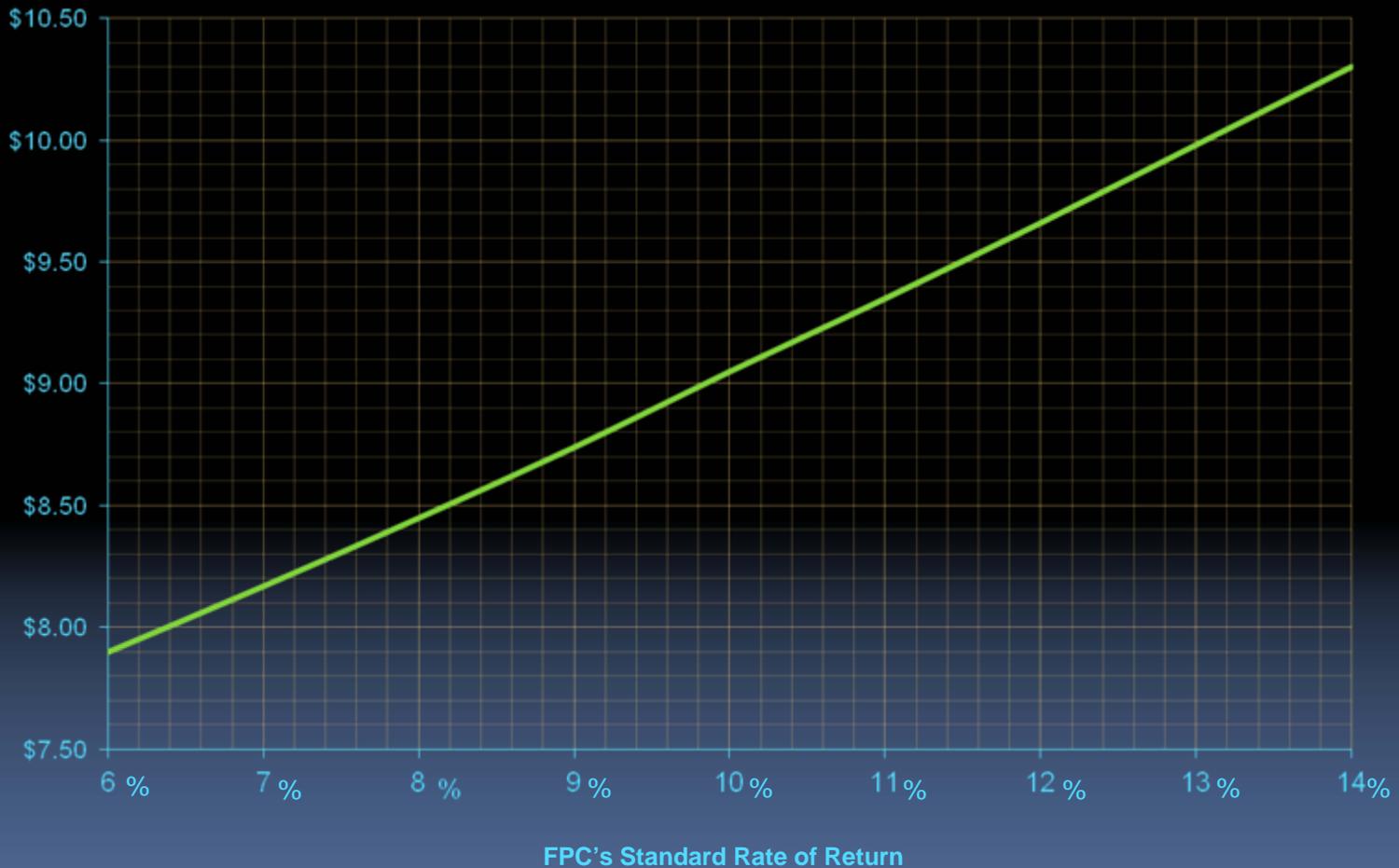
Note the comparison standard used is always "half today's cost" on distillates. This is no accident. We use it to enforce how FPC's pipeline transportation model indisputably avoids Alaskan's energy costs



# Sensitivity of Total Cost of Gas to FPC's Standard Rate of Return

## Case 1 at 19 Bcf/Year

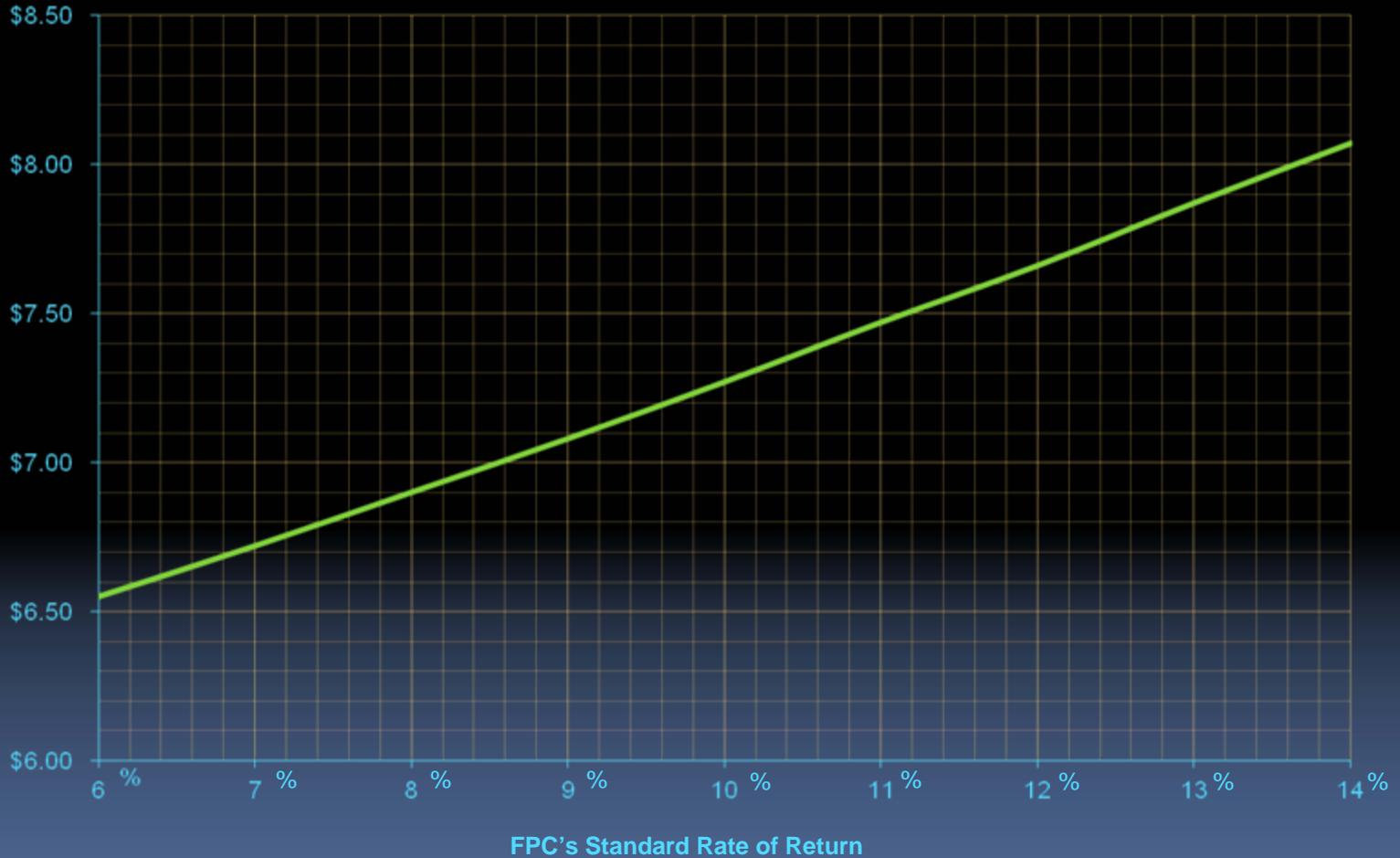
Total Cost of Gas, Delivered



# Sensitivity of Total Cost of Gas to FPC's Standard Rate of Return

## Case 1 at 30 Bcf/Year

Total Cost of Gas, Delivered

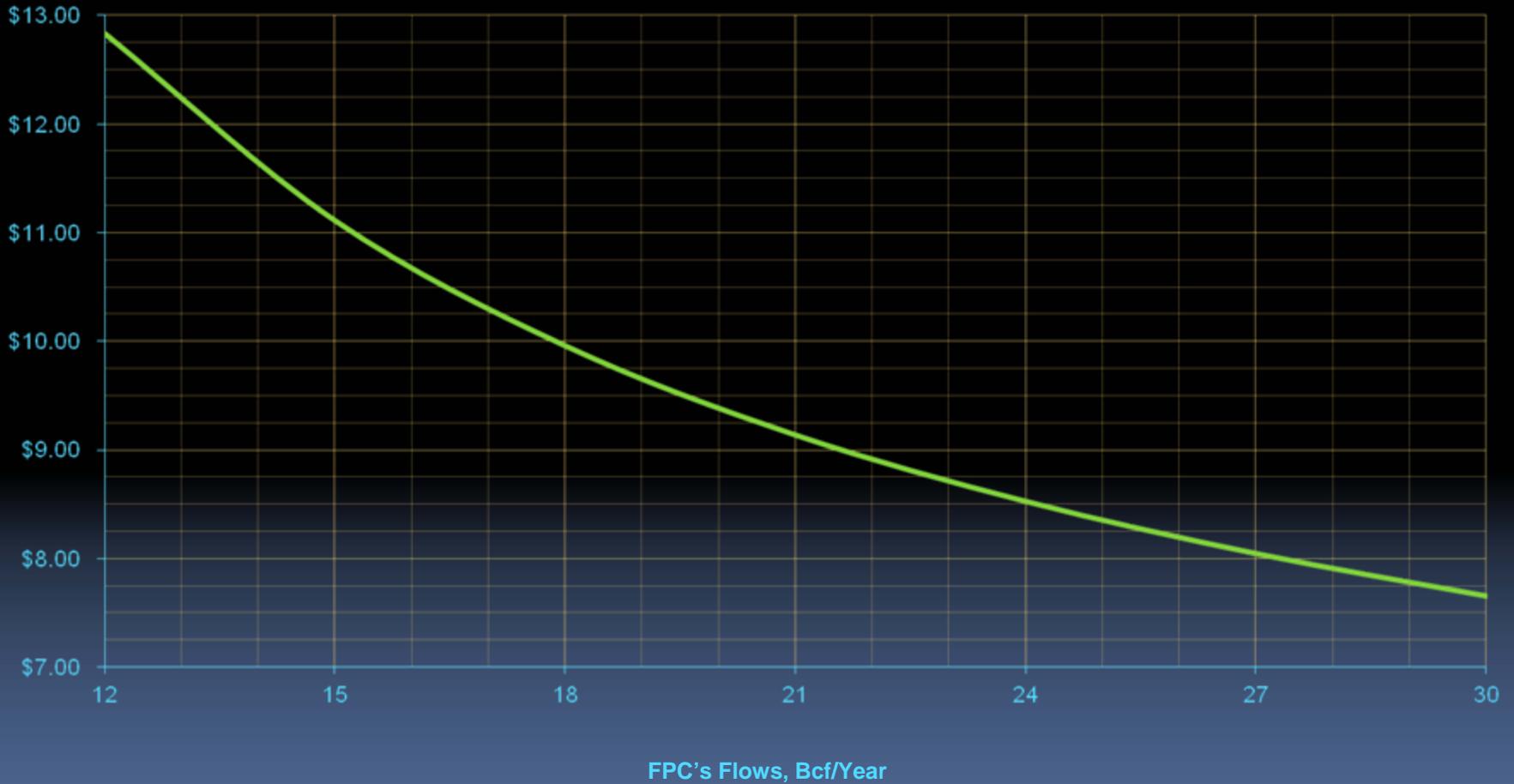


# Sensitivity of Total Cost of Gas to FPC's Gas Volumes

From 12 Bcf/Year to 30 Bcf/Year

Total Cost of Gas  
Delivered

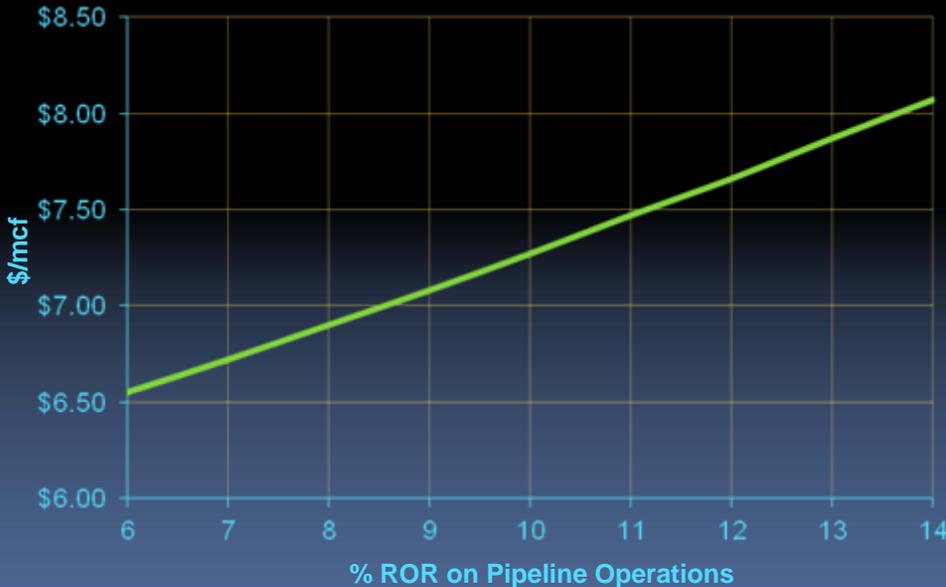
## The Ability of Pipelines to Reduce Costs as Volumes Grow



# FPC's Total Cost of Gas Under Best Conditions

- There is economic justification for improving the Interior's nominations from 19 Bcf/yr to 31 Bcf/yr. This means that using FPC's gas would lower costs to GVEA, Eielson AFB, and Alyeska Pipeline Service Company. In this snapshot, we'll assume that 30 Bcf/year will be the final outcome, thus we will keep it constant in this sensitivity
- FPC estimates its Capex at \$716 million. Since this snapshot entails "good conditions", let's also leave this as constant
- The standard rate of return allowed for pipeline transportation is about 14%. Because through FPC's organizational and financial models, a 12% ROR provides investors an 11.1% annual ROI on shares, FPC has reduced its ROR to 12% accordingly. If investors accepted a 7.21 ROI on the share investments, FPC could lower its ROR to 6%. Since this sensitivity factor can be argued to be the most discretionary of three factors, let's leave the ROR as our variable in this snapshot

**\$716 million Capex, 30 Bcf/yr, Variable Standard Rate of Return**

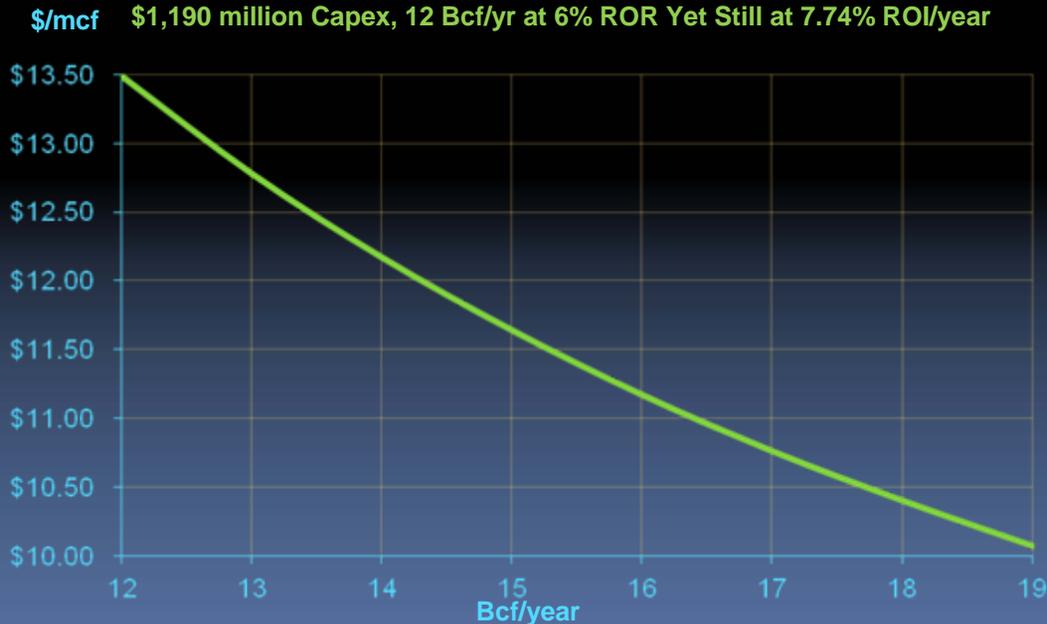


## Relationship of Pipeline ROR to Annual ROI on Dividends

Total Gas Cost \$/mcf	ROR on Pipeline Operations	Annual ROI Dividend Payments
\$6.55	6%	7.21%
\$6.72	7%	7.81%
\$6.90	8%	8.42%
\$7.08	9%	9.06%
\$7.27	10%	9.72%
\$7.47	11%	10.39%
\$7.65	12%	11.07%
\$7.87	13%	11.77%
\$8.07	14%	12.49%

# FPC's Total Cost of Gas Under Worst Conditions

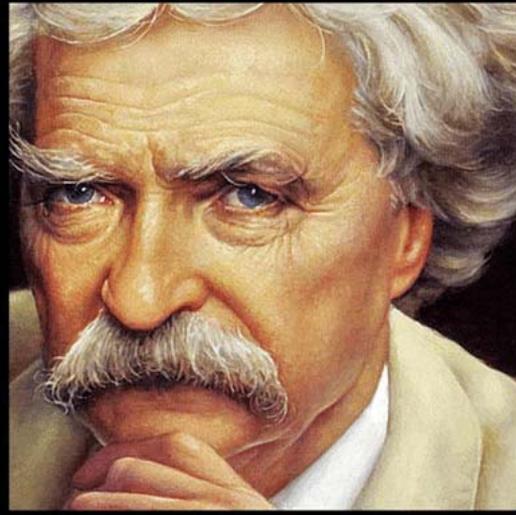
- Again, FPC feels its cost estimate is accurate. It was developed on the basis of recent pipe quotes which reflect the lower cost of steel evident today vs. when AGDC's estimate was prepared. For example, ExxonMobil was quoted on January 9, 2011 as stating that waiting a year (from 2009 to 2010) to start their \$8.6 billion project shaved 22.5% from the Capex of their Barzan natural gas project. Coincidental with arguments FPC provided against the feasibility of ANS gas exportations, this project is located in Qatar, above the 900 Tcf Northfield gas reservoir.
- When presenting a sensitivity based on good conditions, it is only fair to consider the worst of conditions. Consequently, the curve below raises FPC's Capex by 65% (from \$716mm to \$1,190mm), consistent with peak historical steel prices across a range of flows from 12Bcf/yr to today's current nominations of 19 Bcf/yr. Under the worst of conditions, expectations for rates of return need to be tempered. Consequently, this curve assumes a 6% rate of return on pipeline operations. However, the ROI or annual dividend yields, remains fixed at 7.74% to sustain interest from investors to purchase par value shares in FPC.
- Keep in mind that skepticism and optimism often define the extremes of reality. For example, under 17 Bcf/yr, FPC's pipeline would revert to 10" and a \$596mm Capex. Since this slide belongs to the skeptics however, we will dismiss reality for now in an effort to keep them at the very least "suspiciously happy".



## Why Consider the Worst Case?

“A man cannot be comfortable without his own approval”

“The man who is a pessimist before 48 knows too much; if he is an optimist after, he knows too little”



## And Why Consider the Best Case?

“I was seldom able to see an opportunity until it has ceased to be one”