

Analysis of Preferred Alternatives

Objective: Manage gas supply to provide safe and reliable gas service for customers.

Criteria	CO ₂ Removal	Blending/CO ₂	Blending/Kern
<u>Safety</u> – Ensure gas supplies delivered to customers will burn safely and efficiently	<ul style="list-style-type: none"> Provides interchangeable gas 	<ul style="list-style-type: none"> Provides interchangeable gas 	<ul style="list-style-type: none"> Provides interchangeable gas
<u>Reliability</u> – Ensure sufficient gas supplies and transport capacity are available to meet customer demand	<ul style="list-style-type: none"> Proven history of reliability 	<ul style="list-style-type: none"> High wintertime reliability Lower summer/shoulder month reliability 	<ul style="list-style-type: none"> Major concerns over availability of intraday gas supplies Concern over contracting for long-term gas supplies
<u>Implementation</u> – Factors that impact the ability to successfully implement the alternative	<ul style="list-style-type: none"> In place 	<ul style="list-style-type: none"> Complex concept to blend Reasonable to implement 	<ul style="list-style-type: none"> Complex concept to blend Potential right-of-way permitting issues.
<u>Cost</u> -			
Total engineering estimate		\$5.7 million	\$12.2 million
1 st Year Annualized COS* * assumes gas cost of \$5.00	\$6.6 million*	\$6.16 million*	\$6.09 million*
Transition costs required	None	None	1-2 years
<u>Additional Cost Analysis</u>			
2006 Annual COS	\$5.8 million	\$5.9 million	\$7.6 million
Net Present Value of Costs			
2008	\$16.7 million	\$16.9 million	\$20.6 million
2011	\$23.9 million	\$24.2 million	\$30.8 million
2015	\$30.0 million	\$30.1 million	\$39.2 million

	Gas Interchangeability¹	CO₂ Removal	Blending/CO₂	Blending/Kern
<p><u>Affiliate Recognition –</u></p> <p>Does a conflict exist?</p> <p>With which affiliate?</p>	<ul style="list-style-type: none"> • Yes. • QPC is flowing gas on its system in compliance with its pipeline tariff and standards that do not meet QGC’s transition range. QGC would like to have as much of this gas as possible meet its transition range. 	<ul style="list-style-type: none"> • Yes • If QTS provides the CO₂-removal service, QTS will want to obtain a typical non-regulated return on its assets. QGC would prefer that QTS use QGC’s allowed rate of return in order to hold costs down. 	<ul style="list-style-type: none"> • Yes. Same analysis as CO₂ removal plus the following: • The only pipeline company available to provide blending service is QPC. QPC will want to earn its allowed rate of return on investment for its blending service. 	<ul style="list-style-type: none"> • Yes. Same analysis as for blending. • No affiliate analysis is required for the Kern River portion.
<ul style="list-style-type: none"> • Minimize the Conflict 	<ul style="list-style-type: none"> • QGC has analyzed whether there is a way to minimize the conflict by invoking §13.5 of QPC’s tariff or applying at the FERC for a change in QPC’s tariff. 	<ul style="list-style-type: none"> • QGC would want to negotiate a contract with its affiliate not to exceed its Utah allowed rate of return. • QGC could take over the ownership and operation of the plant and eliminate its affiliate issues. The costs would be the same as under the current processing agreement. • QGC could negotiate with a third party. 	<ul style="list-style-type: none"> • Same analysis as CO₂ removal plus the following: • QGC will have to actively participate in QPC’s “blending rate” filing. • There is no third-party pipeline situated or available to provide such a service. 	
<ul style="list-style-type: none"> • Prioritize Customers First 	<ul style="list-style-type: none"> • QGC has analyzed the possible outcomes of going to FERC to invoke §13.5 and/or change QPC tariff. • QGC’s customers have saved \$44 million by allowing the coal-seam gas to flow. • If §13.5 is used to keep coal seam gas that meets QPC’s tariff off QPC’s system, QPC’s customers would use §13.5 to keep QGC’s company production, that does not meet QPC’s tariff, off QPC’s system. 	<ul style="list-style-type: none"> • QGC will advocate for its rate of return in negotiations with its affiliate to provide this service. • A third party would require a higher rate of return. 	<ul style="list-style-type: none"> • Same analysis as CO₂ removal plus the following: • QGC will champion at FERC the best position for its customers on QPC’s blended rate filing. 	

¹ This underlying issue has affiliate considerations which apply to all three options.

	Gas Interchangeability	CO₂ Removal	Blending/CO₂	Blending/Kern
<ul style="list-style-type: none"> • Prioritize Customers First - cont'd 	<ul style="list-style-type: none"> • Costs for processing company-owned gas could be \$8-18 million annually. • Customers' overall costs are lower by not going to the FERC. 			
<ul style="list-style-type: none"> • No undue influence 	<ul style="list-style-type: none"> • QGC is willing to go to the FERC and seek relief but believes, as do other parties, that this is not a prudent choice. 	<ul style="list-style-type: none"> • If costs are set so that they do not exceed QGC's allowed rate of return in Utah, that should address any claim of undue influence. 	<ul style="list-style-type: none"> • Same analysis as CO₂ removal plus the following: • The outcome will be a just and reasonable FERC approved blending rate. 	

h:\state\utah\gasquality\co2matrixexpanded