1.If the state subsidizes TransCanada's costs if the contract fails, should the state get the following concessions in return:

a. Lower Canadian rate of return on equity for state gas shipment costs?

By subsidize I assume you mean the state assuming the entire risk of failure to sanction the project. Under the MOU, if the project is not sanctioned, even if the state does not exercise the 40% ownership option, the state is to repay TransCanada everything it has spent since January 1, 2013, plus interest.

In the normal course of business some of these risks are assumed by pipeline companies all the time. These include the costs to conduct an open season should the open season fail, and some of the costs pursuant to exercising precedent agreements should some of the precedent conditions not be met.

The rate of return earned by pipeline companies reflect the risk they are incurring. If they are not incurring these risks they should earn a lower rate of return.

The rate of return to TransCanada in the MOU is about the same as awarded by the National Energy Board in Canada for other similar pipelines. Accordingly, if TransCanada is not incurring these failure to sanction risks, the 12% return on equity in the MOU is, in my judgment, too high by market standards, and should be reduced.

b. Other concessions?

As discussed above, per the MOU if the project is not sanctioned the state has to reimburse TransCanada its costs plus interest. The interest rate is 7.1%.

As discussed above, per this arrangement TransCanada is incurring no risk of the project not being sanctioned. Accordingly, they should earn the riskless interest rate. This is considered to be the rate on U.S. Treasury Bills.

I believe TransCanada has stated that they are using equity to fund the pre-FEED and FEED, and 7.1% is less than their cost of equity. However, that is not the way to think about it. Corporations use their cash for a number of things, and return they get reflects the respective uses. For instance, when they have extra cash to invest for short amounts of time in various commercial paper, they get returns very similar to short-term bond yields and not their pipeline cost of equity.

Given sure re-payment if the project is not sanctioned and the ensuing low risk of the investment, shareholders should be indifferent between investing funds for the pre-FEED and FEED, and buying treasury bills.

Accordingly, in my judgment, the rate of interest for repaying TransCanada in the event the project is not sanctioned should be tied to the yield on 5-year Treasury Bills on the date of the enabling legislation. (FID would be in about 5 years.) Currently that rate is about 1.6%.

2. If we take the risks of royalty in kind (RIK), should shippers be required to sell our gas at the same price and terms they get?

In my judgment, if the shippers are not required to do this, it would expose the state to significant risk. There is no question the producers have more extensive experience, expertise, and efficiency in marketing gas in Asia than the state will have. If the producers are not selling the state's gas they will be in direct competition with them. The market is only growing so fast and the incremental gas demand is limited. Whoever is able to penetrate the market most efficiently will get the higher prices, and whoever is less efficient could conceivably get prices considerably lower.

Moreover, if the state is in competition with the producers, this competition itself could drive prices lower as the state and producers approach the same buyers.

While the HOA says the producers are willing to negotiate an agreement to purchase and dispose of the state's gas, that is much weaker than having a provision in the statute that says in exchange for taking taxes and royalties in-kind the producers will sell the state gas.

The benefit the producers get for the state taking the gas in-kind, and taking the firm transportation agreement, is that it saves the producers from incurring the up-front capital cost for the state's share. In exchange for that there is no reason they could not market the state's gas. That is exactly what happens under the in-value system, without marketing fees.

3. Should the best interest findings rules remain as they were in the original bill, not as they were addressed in House Resources to say a "best interest finding" for RIK is required if shippers sell our gas?

Section 25 of the current bill amended AS 38.05.182(a) to say that it is not in the best state's interest to take gas in-value if the producers sell the state's gas with their gas at the same price.

This issue was not addressed in the original bill.

The language in the current bill still does not compel the producers to sell the state's gas. Accordingly, in my judgment, that language would still open the state up to the risks described above.

4. He testified that with the risk the state is taking in this contract, our government take is a bit low. Why, and what should it be?

Under the terms of the HOA, MOU, and the bill, the state would incur the risk of spending 25% of \$2.2 billion (\$550 million) for pre-FEED and FEED and not have the project sanctioned. In my testimony I suggested that the producers may be better equipped to handle that risk:

- Through diversification the producers will sanction some projects somewhere and make money no matter what. The state only has this.
- The corporations have finite capital that go to the best projects. The capital for this project is competing not only against other gas projects, but other high value oil projects.
- Through state and federal income tax deductions, the state and federal governments will be paying for approximately 40% of these costs.

Where other countries incur these risks they are generally incurred by national oil companies (Qatar, Nigeria, Malaysia, Argentina, Venezuela, Indonesia) where the government takes exceed 80%, where here it is 60%.

Given the cost structure of the project and the proposed cost-sharing arrangement it would be very difficult to institute a production tax rate high enough to get the government take to 80%.

The more interested the producers are in the project, the less they need the state's money, and the less interested they are, the more the state should avoid this risk.

Accordingly, the legislature may want to consider the option of buying into the project once it is sanctioned, and foregoing financial participation in pre-FEED and FEED.

5. If we need more in-state gas should we be allowed to require production by shippers at an RCA-governed "reasonable" price?

If there is a situation where more in-state gas is needed, since the export gas will be subject to long-term sales contracts, it will not be possible to divert the gas for in-state use. Therefore it will be necessary for the producers to produce more gas.

This would be a relatively small amount of gas. The reserves will be adequate. The capacity will be adequate or could be made adequate. And while the terms of the leases may not compel the producers to produce more, the legislature may want to consider terms in the statute to compel them in exchange for the state taking its gas in-kind.

I do not see a commercial rationale why this would be problematic. The alignment of interests has to work both ways.

Obviously the producers should be adequately compensated for the gas, at the Asian netback value. That way they are not losing any money on the in-state sale.

I assume the RCA would have authority to approve the sales price contracts from the producers to an in-state shipper. However, they may need additional authority to be able to determine what the reasonable netback value is, and the legislature may want to consider putting such authority in the statute.

<u>6. For in-state gas, should the tariff charged by TransCanada to the state or in-state users be regulated by "reasonable rate" rules historically used by RCA?</u>

Under the HOA the tariffs on the pipeline will be un-regulated, even for in-state gas. There may be reasons to consider the option of regulating it.

Under the proposal the capacity to ship in-state gas will be owned by TransCanada and perhaps AGDC if the state exercise the ownership option.

The pipeline owner will have a monopoly. They will pass through their costs to customers. They will make more money the higher the costs are through the return on equity.

Accordingly, one of the main functions of regulation is to assure prudent spending. Without regulation there will be no neutral place for consumers who are paying for imprudent spending to go. Under this arrangement they would have to go before the very people who may have spent imprudently, rather than an independent entity.

In the proposed regulatory arrangement the state would be conflicted as a pipeline owner or partner to a pipeline owner. This will be an accountability problem.

Accordingly, the legislature may want to consider the option of regulating at least in-state gas under the RCA.