# Royalty Information Briefing #5
# - Bonuses and Land Rental Fees -

**What are Bonuses?**

Bonuses[1] are up-front lump sum payments made by the oil and gas companies to the government for the right to explore, develop, and produce oil and natural gas resources. Many jurisdictions, including Alberta, receive revenue each year from bonus payments. Although these revenues are sometimes significant[2], revenue generation is not their purpose. Rather, the purpose of bonus payments is the allocation of mineral rights. The amount of a bonus payment is essentially determined entirely by the investor. When there is a competitive bidding process, as there is in Alberta, bonuses represent a very efficient way to fairly allocate mineral rights. Rights are simply awarded to the highest bidder.

**What conditions need to apply?**

Bonus bids are not appropriate for every situation or jurisdiction. In new exploration areas, for example, there may not be enough knowledge of the resource to construct a meaningful bid. In these or other areas there also may not be enough competition – too few companies – to ensure that bid values are fair. In Alberta, as in Western Canada generally, and in the United States, there is a great deal of resource knowledge and a high level of competition. In Canada's offshore regions—e.g., the Newfoundland and Labrador offshore and the Beaufort Sea in the North—information is relatively limited, as is the number of active companies. In these cases, mineral rights are allocated by "Work Commitment" bids, where the bidder offering to conduct the greatest amount of investment is awarded the lease.

**How are bonuses determined?**

There are many factors that ultimately determine the amount of money that a given company is willing to pay for any particular oil or gas lease: How important is this lease to the company? What are other companies paying for similar or nearby leases? What has this company traditionally paid for such leases? Etc. Practical matters notwithstanding, economists have developed a formal procedure for determining how much ought to be paid as a bonus to acquire a lease. This procedure is known as Expected Monetary Value (EMV) analysis. After accounting for all costs, including risk and rate of return[3] and payments to government including royalties and taxes, the remaining value represents the maximum amount to be bid. This calculated value is then most often discounted by experience. The degree of such discounting depends on the answers to questions such as those previously identified.

The concept of EMV highlights the notion of expectations. This is extremely important in determining the value of the bid as the bid cannot be based on actual petroleum production, costs and prices, but instead must be based on expected values for these and other import variables. For example, current prices may be very high but the investor may expect these prices to decrease. In this situation, the bid would be based on the expected price not the current high price. Since the future can never be known with certainty, a typical investor will tend to be cautious. Such caution helps explain a commonly occurring lag between increased prices and increased bid values. Figure 1 helps illustrate this situation with data for Alberta. The figure

[1] Bonuses are sometimes referred to as Signature Bonuses, indicating that the payment is made when the lease agreement is signed, or more accurately, for the right to sign the agreement. Other distinctions are Development or Discovery Bonuses and Production Bonuses, indicating that the bonus is paid upon reaching some milestone such as when a discovery is made, when development activities begin, or when a prescribed level of production is achieved.

[2] See *Royalty Information Briefing#1 – What areRoyalties?*, Alberta Department of Energy, 2007.

[3] The risk and rate of return is unique for each company, though within a relatively narrow range for the industry.

clearly shows the relationship between bonus bid values and prices, and that changes in bid values tend to lag changes in prices.

Because the investor takes all of the risk in a bonus bid paid on a particular lease, the amount of discounting done to determine the bid amount will be significantly higher than if that risk is shared with the resource owner. Royalties, by their nature, involve a shared risk between the investor and the resource owner.

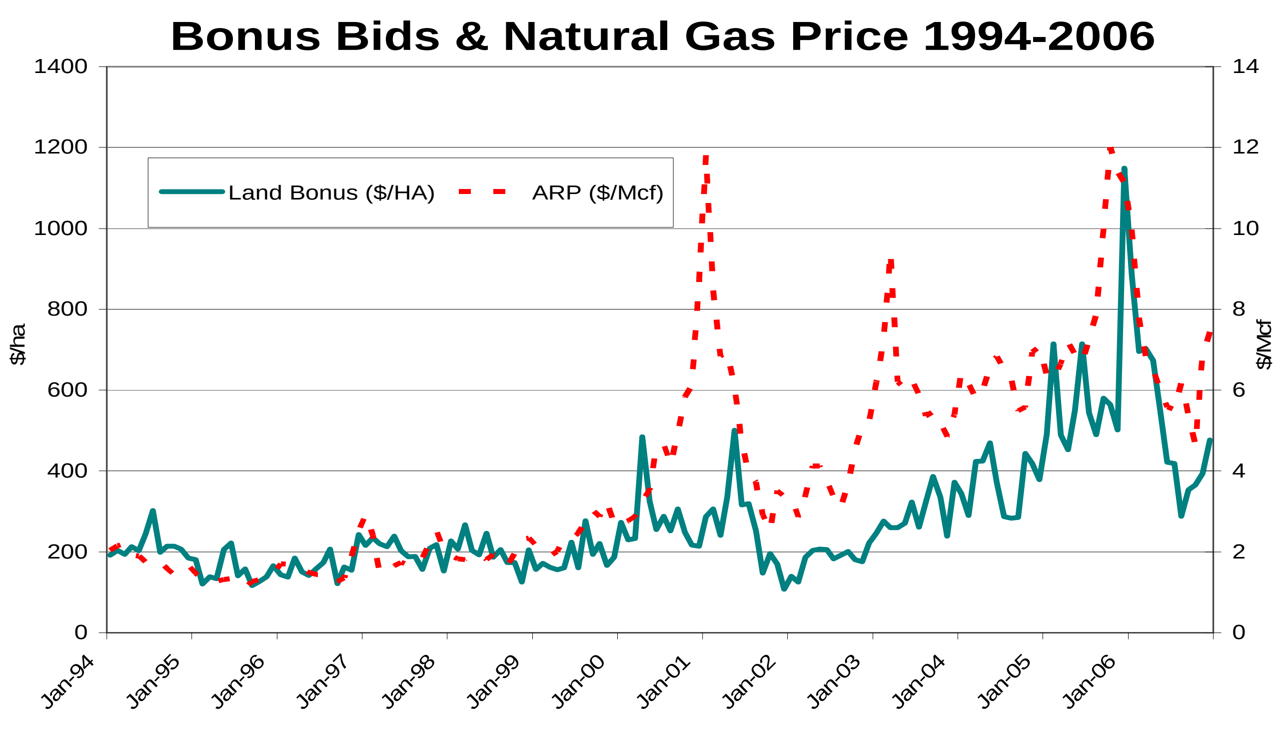
The understandable caution from investors suggests that bonuses ought to represent a relatively small portion of the government share, with the remainder coming from other fiscal instruments.[4]

**What are Land Rental Fees?**

Land rental fees are applied in almost every jurisdiction. Similar to bonuses, rentals are more a land management tool than a means to capture the fair share. They have basically two purposes: (1) to encourage the relinquishment of mineral rights where exploration or production is not being actively pursued and (2) to cover administrative costs associated with managing the resources.

Most jurisdictions apply a fixed fee, expressed in units such as dollars per hectare, per acre, or per square kilometre. The fee in Alberta is $3.50 per hectare for conventional oil and gas leases. For oil sands leases the fee is either $3.00 or $7.00 per hectare (/ha), depending on the area of the province. British Columbia charges $7.50 /ha. Some jurisdictions such as the United Kingdom and public lands in the United States apply escalating rentals whereby the fee increases substantially with time.

**Figure 1**:




[4] See *Royalty Information Briefing #1 – What are Royalties*?, Alberta Department of Energy, 2007.