

Additionally, if more lessees choose the transition option, the program would benefit through increased deep gas development.

The following table displays the various deep gas lease terms depending upon whether § 203.48 is exercised. Note that lessees of post-2000 leases could replace their royalty relief and deep gas drilling terms with those available to pre-2001 leases, but could not substitute different post-2000 lease terms (that is, lessees of Sale 178 leases cannot choose those terms applicable to Sale 182 leases). Moreover, if a post-2000 lease was issued without any royalty relief for deep drilling in shallow water, the lease could not claim the benefit of the terms for deep drilling associated with pre-2001 leases as described in this proposed rule. If a

post-2000 lease already has used some royalty suspension volume and requests this transition option, then we would deduct the used royalty suspension volume from the substituted royalty suspension volume. The supplement is not affected as long as the criteria for royalty relief from drilling an unsuccessful well are met (e.g., drilling starts on the unsuccessful well deeper than 18,000 feet TVD SS after the publication date of this proposed rule). Finally, we do not allow a reverse conversion: lessees cannot replace the terms offered in this proposed regulation to leases in existence on January 1, 2001 with those terms we already made available to post-2000 leases when they were sold.

In summary, if we issued a shallow water lease in a sale held after January

1, 2001, but before the effective date of this final rule, the lessee may substitute the provisions proposed here for the deep gas incentive terms in the lease. If a lease is eligible and the lessee chooses to substitute, then the lessee would have to do so within 180 days of the final rule's effective date. Once this option is selected, the post-2000 lease is treated administratively like a pre-2001 lease for royalty suspension purposes. Accordingly, to obtain the full drilling and production benefits derived from activities undertaken before exercising this option, lessees of post-2000 leases must satisfy the same timing milestones required of pre-2001 leases, including activities undertaken during the period before the effective date of the final rule.

#### ROYALTY RELIEF FOR EXISTING AND NEW LEASES

| Program element   | Proposed relief<br>terms for existing<br>leases | Sale 178 lease<br>terms | Sales 180, 182,<br>184, 185 lease<br>terms |
|---|---|-------------------------|--|
| A Successful Qualified Deep Well from 15,000 to less than 18,000 feet TVD SS. | 15 BCF .....                                    | 20 BCF .....            | 20 BCF                                     |
| A Successful Qualified Deep Well 18,000 feet TVD SS or deeper .....           | 25 BCF .....                                    | 20 BCF .....            | 20 BCF                                     |
| An Unsuccessful certified well 18,000 feet TVD SS or deeper .....             | *5 BCF .....                                    | 0 BCF .....             | 0 BCF                                      |
| Maximum royalty suspension per lease .....                                    | 35 BCF .....                                    | 20 BCF .....            | 20 BCF                                     |
| Price Threshold Above Which Royalties Are Due .....                           | \$5/MMBTU .....                                 | \$3.50/MMBTU .....      | \$5/MMBTU                                  |

\*5 BCF per unsuccessful certified well may be earned for up to 2 unsuccessful certified wells with a maximum of 10 BCF per lease.

#### Sidetracks

The royalty suspension volumes we propose apply to deep gas production from new wells. A new well is one that does not use an existing wellbore. Drilling efforts that use a new wellbore to bypass lost tools, etc., or straighten crooked holes would qualify as a new well. We propose to require a new wellbore because inclusion of sidetracks would be complicated to administer and most sidetracks are substantially less costly than a new wellbore. Therefore, we chose the proposed royalty suspension volumes based on the cost of a completely new well.

The complication with sidetracks arises primarily due to the fact that the offset distance (kick off point to total depth) of drilling a sidetrack, and thus the cost, of a sidetrack is generally more variable than for a new well drilled to a given depth interval. While the sidetrack from near the top of an existing well may cost almost as much as a new well, a sidetrack from, for example, 14,000 feet down to a 16,000 foot reservoir should be less costly. Recent API surveys show average drilling costs of a sidetrack are from one-half to two-thirds those of a new

well, largely because the average length drilled is half or less.

Though it may appear conceptually desirable to do so, we have not proposed a royalty relief instrument for new deep sidetracks for several reasons. One, providing the same amount of royalty suspension volume for all new deep sidetracks as compared to new deep wells is neither fair nor cost-effective since it would result in a windfall for those fortunate enough to have sidetrack opportunities. Two, the cost data we currently have available on sidetrack drilling are not sufficiently exhaustive on length and drilling depth to allow us to conduct the same in-depth analysis that we undertook for determining the appropriately-sized royalty suspension volumes for new deep wells. With the exception of the prolific Norphlet trend, so little sidetrack drilling has taken place at deep depths that historical evidence alone may not offer a sufficiently reliable guide about these relationships to allow us to determine the proper level of incentives for deep sidetracks. Three, based on the cost data and drilling observations we do have, the expected net cost of a new deep well under the proposed royalty relief is still higher than the expected net cost of a deep

sidetrack with no royalty relief in over 90 percent of the reservoir targets drilled to deep depths. For the remaining cases, the differences between the full costs of sidetracks and costs net of royalty relief for new wells is small. So royalty relief only for a new well is generally not large enough to distort investment decisions by reversing the relative economics of a new deep well versus a new deep sidetrack.

To help us evaluate the possible significance of deep sidetracks, we would like responses to the following questions included in comments:

- When and how often is drilling a sidetrack used to explore a new reservoir rather than to supplement an original development or delineation well, and is the situation different by drilling depth?
- How important is sidetracking to a deeper depth in comparison to sidetracking in shallower pay zones, and why?
- Would the proposed relief program distort decisions in favor of more costly new deep wells instead of less expensive deep sidetracks? If so, how serious and/or extensive would this effect be?