INTRODUCTION

Rockies Gas Production Challenge: The U.S. Energy Information Agency (EIA) indicated in its Annual Energy Outlook that Rocky Mountain region annual gas production would need to grow by 1.3 TCF or 162.5 BCF per year, based on the eight years from 2003 through 2010, to meet its 2010 gas production forecast. At least 75 percent of this production growth would come from unconventional reservoirs with tight sands contributing 859 BCF or almost two-thirds of the total forecast. Annual Rocky Mountain gas production has grown from about 2.1 TCF in 1990 to 4.4 TCF in 2003. This represents an average annual growth of 169 BCF per year. Since 2000, however, the average annual production has increased by only 138 BCF per year. Future Rockies production growth rates must increase by some 18 percent in order to reach the EIA target.

Unless the current mix of well productivity improves, the only way to meet the growth target is to increase gas drilling. According to IHS Energy's vintaged gas produc-