

## Proposals To Use Gas To Generate Electricity

NSPI has entered into a long-term contract (10 years) for gas delivery to the termination point of the Halifax lateral in Tuft's Cove. Though NSPI has the option of selling the gas if oil prices are relatively low, for purposes of this analysis, we assume the maximum volume of gas is used (61,400 MMBtu/day). NSPI's current system expansion plans call for a 300 MW gas-fired combined cycle plant to be constructed at Tuft's Cove for in-service in 2004. This unit would use the 61,400 MMBtu and simply displace the base load capacity of the existing plant. The latter could be used for peaking purposes using either oil or gas. Both these projects would reduce the demand for coal.

Stora Forest Industries at Point Tupper is assessing the feasibility of constructing its own gas-fired combined-cycle electrical generating unit. It is reported to be considering a 250 MW plant to meet its own 185 MW power need, with sale of the surplus. It is assumed to come on stream in mid-2003. If it proceeds, it would reduce NSPI's load and the need for capacity expansion in 2004. The net effect on coal would be to advance the timing and increase the reduction in demand arising from the NSPI plan.

At this point, two caveats are in order.

- Whether coal is affected at all in 2000 and beyond, depends on NSPI's ability to expand into export markets. This in turn depends on NSPI's delivered cost of electricity compared with prevailing prices in those markets. Any impact on coal from natural gas would be reduced to the extent NSPI is successful in penetrating export markets.
- Whether CBDC coal or coal supplied by others (including imports) is affected depends largely on their relative prices, and to some extent also on relative sulphur content. The reader is reminded that in the years leading up to 1998, non-CBDC coal met as much as 25% of NSPI's total coal requirements (Appendix A and Fig. V-2, below).

### 3. IMPACT ON COAL

#### Coal Demand Drops Assuming no Electricity Exports

In the absence of very detailed information about export markets, it is difficult to determine how realistic the export case is. For purposes of assessing the impact on coal, we take a conservative approach and assume zero electricity exports.

Taking all these factors into account, and assuming maximum use of natural gas, estimates of electricity production by energy source and the resulting impact on coal requirements depend to some extent on whether NSPI or Stora's plans proceed:

- The initial impact, as the Tuft's Cove conversion comes on stream in 2000, backs out oil completely, and also causes a reduction in the need for coal-fired energy elsewhere on the system (Table V-3). The demand for coal drops by about 400,000 tonnes (Fig. V-1).