**一套** 

## TABLE E.1.8

## KEY ASSUMPTIONS

- Energy projections provided by DOE (attached)
- Utility lifetimes

ICF - 45 Years for All

TRI - 45 Years for Coal

40 Years for Gas

35 Years for Oil, Nuclear

- UOB plants converted to coal must comply with existing coal SIP's
- ICF constrained coal use by \$2000/kW penalty for all new construction
- Nuclear capacity factor 65% TRI; 70% ICF
- SIP and strategy compliance by 1985
- Annual average SIP's (defined by EPA)
- Credit for
  - Overcomplying with SIP's
  - Sulfur Retention in Ash
- Pollution control costs defined by EPA (with input from DOE)

for relatively high-sulfur coals in northern Appalachia and the midwest in comparison to the base case. (See Tables E.1.9, E.1.10, and E.1.12).

Other model results, not reflected in these national summaries, include:

- Most power plant emissions through 1995 come from existing power plants. More stringent new source requirements will not significantly reduce SO<sub>2</sub> emissions.
- Additional SO<sub>2</sub> control in the 31 eastern states is about an order of magnitude more cost effective than controlling the western states. However, western coal is of such high quality, some strategies (e.g., 4 lb cap) did not affect the west at all.
- Increasing the optimization area reduces nation control costs. That is, a 30% reduction in the eastern states is about one-third cheaper if state boundaries are ignored and the least expensive strategy is pursued, instead of obtaining the same overall reduction by reducing emissions in each state by 30%.
- Finally, it should be noted that  $NO_x$  control strategies and combined  $NO_x/SO_2$  strategies will also be assessed. One strategy in particular, use of Limestone