

SO<sub>2</sub> emissions and boundaries as closely as possible. A table that compares the state and grid-aggregate SO<sub>2</sub> emission totals along with percentage differences is presented in Appendix 6. In most cases differences were less than + 15% and the largest was 32%.

For the present application the SURE grid has been expanded (from 30 x 36 to 40 x 42 elements) to the north and east to include more of southeastern Canada. The expanded grid is now includes 63 aggregated SURE areas (see Figure 4.1), ten of which have been selected to represent major sensitive areas. The total SO<sub>2</sub> emissions in the SURE inventory for the eastern U. S. are thought by EPA to be too high and this situation is presently being reviewed by comparing the SURE SO<sub>2</sub> emissions for the utility sector with those computed using the EPA AIR-TEST program. As a result of this review, revisions in the U.S. emissions inventory are likely to occur during Phase II.

In Phase I and planned Phase II activities, U.S. and Canadian modeling efforts have used different grid systems and areas to generate source-receptor (transfer) matrices. Canadian efforts, similarly based upon the aggregation of sources, have resulted in the delineation of 11 regions. Because of this difference, the 11 Canadian regions, which are based on an aggregation of sources on a 127 km x 127 km polar stereographic grid, were projected onto the 63 U.S.