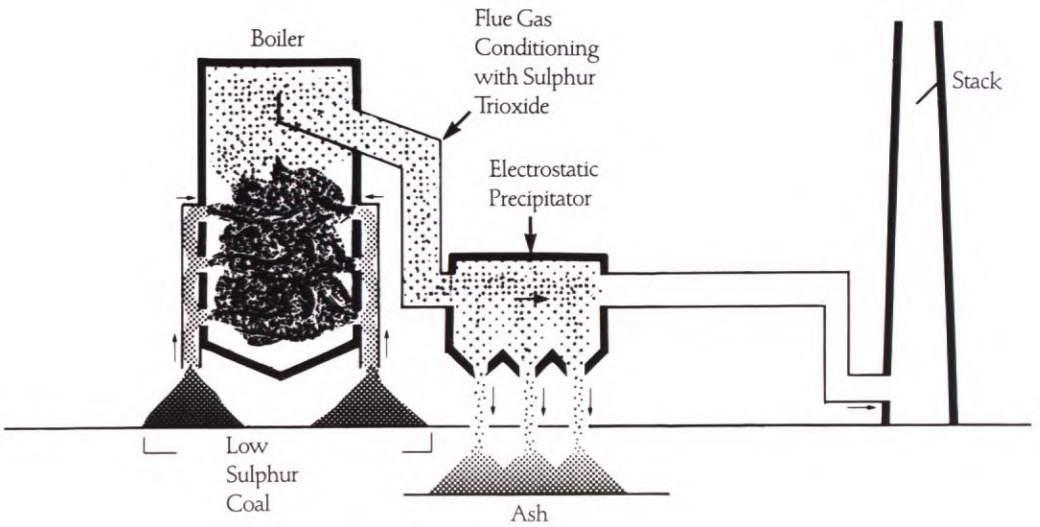
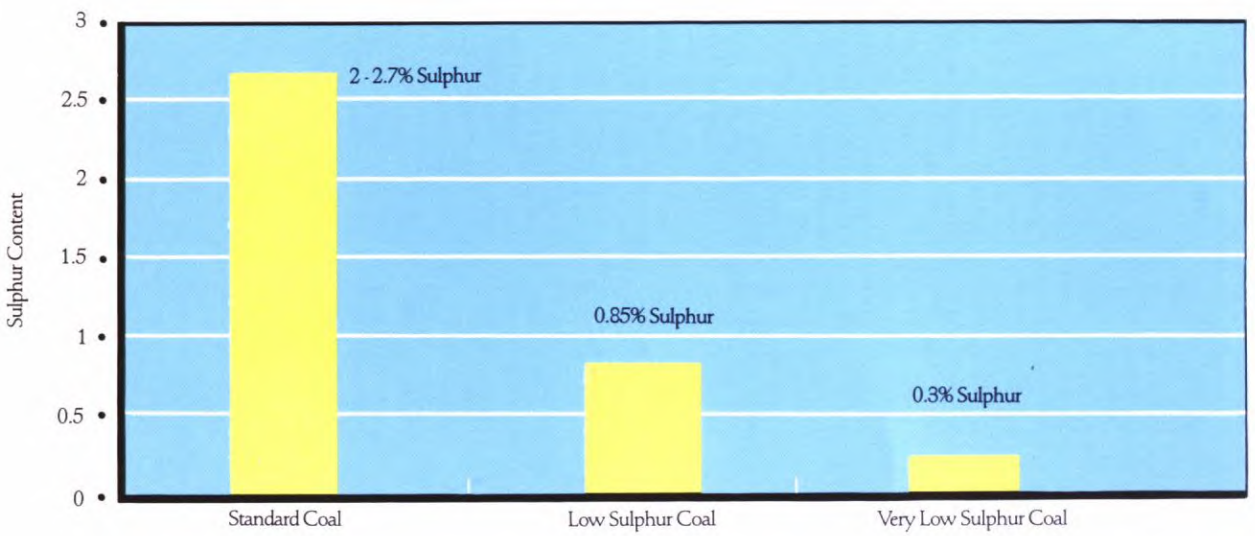
Flue gas conditioning cuts ash emissions



Burning lower sulphur coal reduces acid gas emissions, but in the process it increases the amount of ash emitted from the stack. The reason for this is that electrostatic precipitators that remove ash particles before they go up the stack need a certain amount of sulphur trioxide in the flue gas to operate efficiently. When we burn lower sulphur coal, less sulphur trioxide is produced. This means that fewer ash particles are collected by the electrostatic precipitators and more are released to the environment. By conditioning the flue gas with very small amounts of sulphur trioxide, we let the electrostatic precipitators do their job.

Low sulphur coal reduces emissions of sulphur oxides



By using much more low-sulphur coal, Ontario Hydro has reduced the average sulphur content of the coal it burns from 2.4 per cent in 1976 to 1.3 per cent in 1988. This reduces emissions of sulphur oxides by greatly reducing the amount of sulphur that enters the burner in the first place. Unfortunately, we cannot burn the lowest sulphur coal exclusively because it burns with an unstable flame in our burners. It must be blended with higher sulphur coals before it can be burned safely.