

The opposite was true for the northern system. The study estimated a net benefit reduction in total energy cost to Inuvik and Tuktoyaktuk of \$7.2 million. One problem with the northern supply, Parsons Lake, is that the gas has a high sulfur content.

f) **Other Energy Alternatives**

Solar Energy, whether through sun heat or solar electrical cells, has limited potential in the NWT.

Solar heat collectors for domestic hot water is the most viable use of direct sun heat in the NWT, however the equipment and installation costs of \$2000 (1982 Southern Canada Average), and the fact that many remote northern communities barely glimpse the sun in winter, make the application severely limited.

Nuclear energy, specifically the Slowpoke Reactor, while an extremely controversial issue, has been making great development and safety strides in Canada in the last ten years. The development may have particular application to many NWT remote settlements where space heating and electricity costs are overly high. The NWT Science Advisory Council has been requested by the NWT Legislative Assembly to review the concept and the economics behind the Slowpoke Reactor.

Heat Recovery Systems on NCPG generators are now installed in seven NWT communities and all are judged successful. Meanwhile, the GNWT, NCPG and industry are currently looking into additional sites as well as improved and more complete heat recovery systems in current sites.

Chart 3 and Table 15 provides a summary of the Alternative Energy Options available in the NWT. Potentially anything inside the tree-line could utilize biomass in the form of wood and in some cases peat. It is important to realize that many of these alternatives are uneconomical at current petroleum product cost levels. As well, in some cases insufficient energy would be produced to meet current or future energy needs. Lastly, in many instances diesel back-up generation would be required.