CONCLUDING COMMENTS

The analysis reported in this paper was based on deliberately conservative assumptions about the number of facilities and the amount of data transmitted from each facility. The analysis assumed that a substantial number of facilities are included in the system and that a substantial quantity of data is collected daily from each facility. Costs might be reduced appreciably if fewer facilities were actually included or if continuous instrumental data transmission were triggered by a specific event. While the cost estimates are biased toward the high side, they provide an indication of the order of magnitude of the costs involved in establishing a data collection system for verification purposes.

By way of comparison, if it is assumed that video surveillance exists in only 50 facilities while the remaining 450 facilities generate primarily process monitoring data the cost figures change substantially. Although there has not been a detailed analysis of such a scenario, some rough cost figures can be extrapolated.

If if is assumed that all 500 facilities have their own satellite terminals but only 50 transmit video surveillance data, the capital costs would remain unchanged while the operating costs would be close to US\$5,000,000 per year. If, on the other hand, the process monitoring data are transmitted via telephone channels, and only 50 facilities have satellite terminals, the capital costs would be reduced to about US\$17,000,000 while the operating costs would be increased to about US\$8,000,000 per year.