

Pool, thereby making available for power purposes the maximum amount of water. The control structure sluices equipped with gates which lower to open can be expected to pass low and normal runs of ice while maintaining proposed pool levels, but in the event of an unusually heavy ice run, it is envisaged that all sluices would remain fully open during the run to minimize any obstruction to the floes. During such periods, which are usually of short duration, the normal regulation of the Pool would be suspended as the safe passage of ice is the more important consideration.

The proposed plan of excavations and crest fills in the Horseshoe Falls Cascades would ensure that in the daytime of the tourist season, when a minimum of 100,000 cubic feet per second is to be discharged over the Falls, an unbroken crestline on the Horseshoe Falls would extend from shore to shore and the intensity of flows on the flanks would always be sufficient to produce a very satisfactory scenic spectacle. In the other periods of the year, when a flow over the Falls as low as 50,000 cubic feet per second is permitted by the 1950 Treaty, these works would ensure that an unbroken crestline would always exist, and that the intensity of flow would be such that an impressive spectacle would result. The increasing of the flow over the flanks of the Horseshoe Falls by the diversion of water from the deep channels leading into the central portion of the Horseshoe will reduce the rate of recession in the central portion.

Conclusions

(a) Engineering studies and model tests show conclusively that remedial works are required to prevent impairment of the scenic beauty of Niagara Falls and River under flow conditions to be expected when withdrawals are made for power purposes to the extent permissible under the Treaty of February 27, 1950.

(b) Hydroelectric power works already under construction and scheduled for completion and operation within the next few years could not be fully utilized without detrimental effects on the beauty of the Falls unless remedial works are provided.

(c) In view of the urgent need for the power to be produced by generating facilities already under construction and other facilities to be constructed, initiation as soon as possible this year and completion within four years, of the remedial works authorized by the 1950 Treaty is a matter of urgency in the national interest of both countries.

The objectives for preservation and enhancement of Niagara Falls as contemplated by the 1950 Treaty can best be accomplished by construction of the remedial works described in this report and hereinafter recommended.

Recommendations

In response to specific requests of the two Governments as set forth in the Reference, the Commission submits the following recommendations:

1. Recommendations concerning the nature and design of the remedial works necessary to preserve and enhance the scenic beauty of the Niagara Falls and River.