

## Susitna's licence now reviewed

The Federal Energy Regulatory Commission (FERC) has completed its initial review of the Susitna Hydroelectric project licence application. FERC has asked the Alaska Power Authority to submit additional information before the application will be distributed to reviewing agencies. The additional information primarily concerns the relationship between world oil prices and energy demand forecasts in Alaska. The Power Authority will have 90 days in which to provide the additional material; the process is not expected to interfere with the present timetable for licensing the project.

The Authority's Executive Director indicated that a revision of the project's economic and financial prospects in the light of recent changes in the Alaska economy was already underway to provide the Authority with an up-to-date evaluation of energy demand, fuel prices, and State revenues. The review will also provide the additional information requested by FERC.

## Sri Lanka builds more mini hydro

Sri Lanka is to build about 200 mini hydroelectric projects to generate a total of about 100 MW once the existing major power projects are completed, according to the Ceylon Electricity Board Chairman. He told a regional working group that met in Colombo to draw up a curriculum for the education and training of personnel for mini hydro power stations.

The regional working group sponsored by UNESCO and held at the Institute of Engineers in Colombo comprised representatives from Afghanistan, Bangladesh, India, Nepal, Pakistan and Sri Lanka and its recommendations will be made part of the curriculum of universities and technical training institutions.

Potential areas for the proposed mini powerplants have already been identified and the universities and technical training institutes would train the personnel required for the venture.

A general manager of the Board, S. Boniface, told the working group that in Sri Lanka with its ancient

irrigation heritage and modern irrigation schemes there was a number of dams where mini hydro power plants could be installed. Tube turbines, according to him, were most suitable for installation at these sites because of the availability of regulated flows.

Since Sri Lanka had the characteristic feature of central hills with steep slopes and heavy rainfall providing drainage basins for nearly 100 rivers, Boniface said the upper reaches of these rivers were ideal sites for mini hydropower projects which could provide adequate power to the hill-country tea industry.

## Hermon's snow could irrigate Israel's farms

The Israeli Agriculture Ministry is considering pumping rainwater and melted snow down from Mount Hermon to overcome shortages and to lower irrigation costs for farmers on the Golan Heights. At present water is being pumped up from the Sea of Galilee. There are now 15 reservoirs on the Heights, most of them small, serving the 26 settlements in the area, but their output has to be augmented by water from the Sea of Galilee.

Water from Hermon could be run through hydropower stations along the way, generating between 40 and 90 MW of electricity, about seven per cent of the Israel Electric Corporation's total output.

## USSR starts large turbine manufacture

Specialists in Leningrad have begun to design turbines and generators of 1350 MW capacity for hydro stations to be built on the main Siberian rivers. The first sets are to be assembled at the proposed Turukhansk station on the Nizhnyaya Tunguska, a main tributary of the Yenisey. The planned capacity of this station is 20 000 MW.

The Sayan-Shushensk station is equipped with 720 MW sets, and according to Alexander Dukshtau, one of the designers of the new units, experience shows that it is "quite realistic" to build new and more powerful machines for Siberia and that it is economically feasible to transport them by sea from Leningrad around Scandinavia, across the northern seas and then up

the Siberian inland waterways.

Dukshtau said that water resources in the European USSR had been exhausted for the present. It was therefore planned to build capacities through construction of stations on Siberian and Far Eastern rivers. The energy potential of the Yenisey and its tributaries alone, for example, was estimated at 60 000 MW.

It was economically feasible, he said, to use extra-large generating sets in conditions where a single power grid was being set up in the Soviet Union and where large amounts of electricity would be transported along very high voltage power lines.

## Drought area will get canal

The South African Government has decided to go ahead with building a canal between the P.K. le Roux dam and the drought-stricken Riet river area in the south-western Orange Free State. The Riet river area has been experiencing an exceptional drought and the local Kalkfontein dam has only been able to meet requirements to a very limited extent for the last few years.

This reservoir at present contains less than 3 per cent of its capacity and no water releases are expected in the current season.

## Idukki affects the eco-system

The massive Idukki hydroelectric power project in the South Indian state of Kerala has adversely affected the ecological balance in the area, a recent study sponsored by the New Delhi government has revealed.

The study, which made use of maps of the forests, vegetation types, geomorphology and soil characteristics and data provided by the LANDSAT, the US satellite, and interpreted by the National Remote Sensing Agency, indicate that the plateau above the Idukki project area is undergoing intensive loss of vegetation and erosion.

On the impact of the project on the physical system of the Periyar-Thodupuzha drainage basin, the study says that the damming of the Periyar river has caused a drastic reduction in the river discharge and