MISSOURI RIVER BANK STABILIZATION AND NAVIGATION DEVELOPMENT, SIOUX CITY TO YANKTON

Statement.—The project is set up as a bank stabilization project.

Question.—Why is there no substantial local participation included for bank

Answer.—The proposed project is an extension of the existing project for navigation and bank stabilization on the Missouri River downstream from Sioux City, Iowa. The cost sharing is in accordance with the policy for navigation oriented projects; that is, furnish lands, easements, and rights-of-way, and hold and save.

-Other than the Missouri River Basin, where else is local partici-Question.-

pation eliminated for bank stabilization projects?

Answer .- Projects primarily for bank stabilization that have been recommended by the Chief of Engineers have generally required non-Federal local participation similar to that for projects for flood control. There have been projects for navigation with bank stabilization features in which there has been minimal local participation. In addition to the Missouri River downstream from Sioux City, Iowa, these have included the Arkansas River multiple-purpose project and the Mississippi River below Cairo, Illinois.

Statement.—Replacement of jetties on the Missouri are done as new work

rather than out of maintenance funds.

Question .- Why is there no funds provided for the replacement of these struc-

tures on this project?

Answer.-The cost estimate for the proposed plan includes replacement or repair of jetties, as well as other necessary maintenance work, under the head-

ing operation and maintenance for the channel.

Question.-Why should this stretch of the river cost \$7055/miles for maintenance when the same river now cost an average for maintenance of \$10875 per mile? The average maintenance cost of completed projects of 7 to 9 feet are from 2.22 to 5.62 percent of the actual cost of new work. Why is this project

figured at only .75 percent of estimated first cost?

Answer.—The operation and maintenance estimate for the reach from Sioux City to Yankton is based upon the experience gained from the existing bank stabilization project for Kensler and Miners Bends located immediately upstream from Sioux City. This has averaged about \$7,000 per mile. The design of specific project improvements for the Sioux City-Yankton reach is based upon the experience gained from similar types of improvements that have been constructed in the reaches downstream from Sioux City. This experience has provided improved designs that will have lower maintenance cost per mile than has occurred on some of the older existing works on the lower reach. In addition, the flow in the Missouri River at and below Sioux City fluctuates over a wider range, which contributes to the higher maintenance costs experienced on the existing project. The more controlled flows upstream from Sioux City are expected to contribute to lower maintenance costs in that reach.

Statement.—Interest rate on this project is 31/8 percent.

Question.—If interest rates of these projects are raised materially, will this

project be below unity?

Answer.—The project economic analysis is based upon an interest rate of 3½ percent and the B/O ratio is 1.3. Use of the presentl prescribed rate of 3½ percent would have little effect upon the benefit-cost ratio. Use of an interest rate as much as one to 11/4 percent higher could possibly lower the benefit-cost ratio to about unity.

Question .- Why were interest and maintenance cost ont charged during con-

struction period?

Answer .- Interest during construction has not been included in the economic analysis since benefits from controlling bank erosion will accrue throughout the overall construction period with the completion of each usable segment of the overall work. Maintenance costs are normally not incurred until a project or usable segment of work has been completed. The estimate of average annual maintenance cost includes funds to provide for maintenance of completed units of work to preserve the integrity of each completed unit.

Statement .- Ninety-two percent of the base year traffic and 90 percent of the transportation savings are attributed to barge movements of grain, mainly

wheat.