DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P.O. BOX 60267
NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO
ATTENTION OF:

CEMVN-PM-E

JAN 30 2001

MEMORANDUM FOR Commander, Mississippi Valley Division

SUBJECT: General Investigations, Hurricane Protection, Louisiana, Reconnaissance Study, Request for Time and Cost Exception of Planning Guidance Memorandum 99-01, Reconnaissance Phase Guidance

1. The Hurricane Protection, Louisiana Reconnaissance Study was authorized by resolution of the Committee on Transportation and Infrastructure dated April 22, 1999. The resolution requested that the Secretary of the Army review the reports of the Chief of Engineers for the existing authorized hurricane protection projects to determine if recommendations could be made to provide a higher level of hurricane protection for category 4 or 5 storms.

2. The study is a result of concerns raised by local officials after Hurricane George passed close to the area and caused very high surge elevations against some of the existing hurricane protection levees. A review of all the projects in one report will permit a comprehensive analysis of hurricane protection in Southeast Louisiana and address the concerns that have been raised.

3. Funding for the Hurricane Protection, Louisiana, Reconnaissance Study indicates that the study is to be conducted utilizing the procedures outlined in Planning Guidance Memorandum 99-01 (PGL 99-01), Reconnaissance Phase Guidance. Because of the broad geographical area and complexities of the study, an exception to the normal $100,000 and 12-month cost and schedule limits is requested. Without additional funding and time the study will not adequately meet the primary requirements of a reconnaissance study, which are to determine if there is Federal interest in proceeding to more detailed feasibility studies and to prepare an adequate project study plan for the feasibility phase.

4. The study area is large (approximately 7000 square miles) and has varied land use ranging from barrier islands and coastal wetlands to agricultural and densely populated urban areas. It encompasses ten parishes and eight levee districts. The area is divided by the Mississippi River, which requires separate analyses of alternatives on each side of the river. In addition to the varied land use and subsequent needs, the study area also

includes the Barataria/Terrebonne National Estuary and the Jean Lafitte National Park, which require unique considerations in flood control and water resources management.

5. Extensive, time consuming coordination with the many interests in the area will be a major factor in whether the study is successful. Many special interest groups will have input into the development of proposals for flood control. Already interests are proposing plans that range from comprehensive approaches that involve layered levels of protection to small areas that provide places of refuge. A study of one limited area for $100,000 does not address the need for comprehensive approaches to problems in the area, is contrary to the recent emphasis on watershed solutions to water resources problems, would not address the desires of local interests for area-wide solutions, and would not be consistent with Barataria/Terrebonne National Estuary Program (BTNEP) goals. A limited evaluation will not allow the New Orleans District to address these concerns in even a cursory manner.

6. The study will encompass five existing authorized hurricane protection projects. These projects have a total cost of over $1.4 billion. The area has a population of over 1.5 million people, with many located in highly urbanized areas that are at or below sea level. The existing authorized hurricane projects provide varying levels of protection ranging from 100-year frequency (Category 2) to 300-year frequency (fast moving, low strength Category 3). A hurricane of greater strength would cause devastating damage and loss of life. In addition, the lower Mississippi River contains a highly developed port and industrial complex that provides major national economic benefits. This complex would suffer severe damage from a category 4 or 5 hurricane. Because of the geographic and hydrodynamic complexity of the study area, alternatives other than simply raising the elevations of all the existing levees and structures need to be reviewed. These could include construction of barrier islands, wetlands restoration, and creation of places of refuge in metropolitan areas that would provide a high level of protection.

7. As presented in PGL 99-01, the study tasks include determining that the water resources problem(s) warrant Federal participation in feasibility studies; defining the Federal interests based on a preliminary appraisal consistent with Army policies, costs, benefits, and environmental impacts of identified potential project alternatives; preparing a Project Study Plan (PSP); and assessing the level of interest and support from non-Federal entities in the identified potential solutions and cost sharing of feasibility and construction. Based on the above, it has been determined that this simply cannot be accomplished for the Hurricane Protection, Louisiana, study with $100,000. Should the amount of data collection for the overall area be limited to a $100,000 effort, we would not be able to give adequate attention to concerns other than flood control, and the level of detail with respect to flood control would be limited. We estimate that a feasibility study that would follow the reconnaissance study would likely cost several million dollars. A fully developed PSP in sufficient detail, and an accurately prepared feasibility cost estimate cannot be accomplished with the $100,000 limitation. This will severely limit our ability to secure sponsorship for the feasibility phase of the study.

8. For the above stated reasons, we request a minimum of $500,000 and duration of 18 months for the subject reconnaissance study.

DALE A. KNIERIEMEN
LTC, EN
Acting Commander

Rationale for higher cost and longer duration of the Hurricane Protection, LA, reconnaissance effort:

- This is essentially several studies rolled into one
  - Both sides of the Mississippi River
  - May modify or supplement five existing projects for hurricane surge protection

- The sponsor insists on a very detailed PSP – apparently to minimize study cost growth

- The study area is extensive – 7,000 square miles

- The study area is very complex
  - Complex mix of hydraulic conditions and structures
  - Area includes wide range of uses from barrier islands and wetlands to ag and dense urban areas
  - Multiple site-specific solutions will be examined
  - District wants to pursue a systematic, watershed approach

- Extensive coordination is needed to (1) identify problem areas adequate to support study task development, and (2) develop a consensus on which problems to address
  - Ten parishes
  - Eight levee districts