21 March 1966

SUBJECT: Hurricane Protection - Lake Pontchartrain and Vicinity - Chalmette Area

TO: Chief of Engineers
ATTN: ENGW-V

1. In telephone conversation 3 March 1966, Colonel Kristoferson informed me that Judge Perez, in discussion with General Cassidy and him on 2 March, expressed concern that the project for the Chalmette area includes charges to local interests for bank protection work. Judge Perez felt that this was not a cost of hurricane protection, but a navigation cost to protect the levees against wave wash.

2. Although the protection is referred to as "bank protection" and "foreshore protection" in the authorizing document (HB/221/89/1), the work to which Judge Perez refers consists of riprap slope protection on the hurricane protection levees. The riprap protection will be placed on the channelside of a Mississippi River-Gulf Outlet retaining dike which will become the channelward edge of the stability bern of the hurricane levees.

3. The foreshore distance between the Gulf Outlet Channel and the retaining dike is some 500 feet, and the intervening area is covered with a thick growth of marsh grass. Therefore, no foreshore protection or slope paving is required or included in the Outlet project to prevent slitting of the Outlet Channel due to wave action on the retaining dike.

4. The riprap paving is required to protect the levee barn from wind-generated and vessel-generated waves during high tide periods. Similar slope protection is provided for all other channel and lakeside levees in the hurricane protection project. The existence of the Mississippi River-Gulf Outlet dictates the location of that part of the Chalmette hurricane levee paralleling the Outlet and adds to the exposure of the levee. It is understandable that local interests would contend that the Outlet project should bear some part of the cost of the riprap protection. However, the benefits from the hurricane levees will include the prevention of flood damages and will allow considerable
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SUBJECT: Hurricane Protection - Lake Pontchartrain and Vicinity - Chalmette Area

enhancement in the protected area. No benefits will accrue to the Gulf Outlet Channel because of the levee construction other than those that might stem from industrial development which could conceivably take place within the Chalmette area after it is afforded a higher degree of protection by the levee.

5. In light of the conditions discussed above, it is my belief that the levee slope protection along the Mississippi River-Gulf Outlet Channel is properly chargeable to the Lake Pontchartrain, La., and Vicinity hurricane protection project. However, in view of the divergent views expressed by local interests in direct contacts with your office, your ruling on this matter is requested.

ELLSWORTH I. DAVIS
Major General, USA
Division Engineer

Copy furnished:
New Orleans District
ENGSN-ON (21 Mar 66) 1st Ind:
SUBJECT: Hurricane Protection - Lake Pontchartrain & Vicinity-Chalmette Area

DA, CofEngra, Washington, D. C. 15 April 1966

TO: Division Engineer, Lower Mississippi Valley

As indicated in the authorizing document, riprap foreshore protection against erosion by wave wash from shipping was included as a part of the levee plan for the Chalmette Area. It is considered that the portion of the riprap costs that is required for such purposes should be charged to the navigation project as a Federal cost for wave protection.

FOR THE CHIEF OF ENGINEERS:

JACKSON GRAHAM
Major General, USA
Director of Civil Works

Copy furnished:
New Orleans District
LWTB-T (LWV) 21 Mar 66
S.IND
SUSPON: Hurricane Protection - Lake Pontchartrain and Vicinity - Chalmette Area

DA, Lower Miss. Valley Div, CE, Vicksburg, Miss. 39180 25 Apr 66

TO: District Engineer, New Orleans District, ATTN: LWTB-T

1. Reference is made to letter, EHGCH-OR, GCE, 15 April 1966, to the Honorable Allen J. Ellender, United States Senate.

2. The Chief of Engineers has stated in the referenced letter and has ruled in the preceding 1st Ind that the portion of riprap costs required to protect against erosion by wave wash from shipping should be charged to the navigation project. You should prepare and submit for approval by 27 May 1966 a breakdown of the riprap foreshore and levee slope protection costs, proportioned between the hurricane-flood protection project and the navigation project.

ELLSWORTH I. DAVIS
Major General, USA
Division Engineer
SUBJECT: Hurricane Protection - Lake Pontchartrain and Vicinity - Chalmette Area

DA, New Orleans District, CE, New Orleans, La. 70160 26 May 66

TO: Division Engineer, Lower Miss. Valley Division, CE, ATTN: IMVED-T

1. Estimates requested in 2d Ind are forwarded herewith.

2. The decision of the Chief of Engineers in the 1st Ind is noted and understood. We note a number of implications of interest insofar as the decision is concerned and offer the following observations thereon.

3. The Mississippi River-Gulf Outlet was authorized long before the Chalmette levee was even planned; hence, it seems strange that the Outlet should be burdened with any construction which is subsequently planned. The levee could have been planned at a more remote location where no wavewash hazard would be involved; however, the optimum benefits and costs are derived from a location close to the outlet channel. At this location, the maximum protected area is made available and the considerable benefit of utilizing the spoil bank from the outlet channel is enjoyed, despite the possible hazard of wavewash.

4. The principle of having a project assume the financial burden of a subsequently authorized project may result in many of our marginal projects being forced into a category of less than unity benefit-cost ratio by virtue of factors that could not possibly have been evaluated when the project was presented to the Congress. The application of the principle is equivalent to making the Mississippi River navigation project bear the cost of levee slope paving in the MRM project, or of the Gulf Intracoastal Waterway bearing the cost of the locks which were required in previously authorized waterways in order to permit the levees to be extended to protect additional land areas.

5. This principle is in no wise comparable to that of taking action to correct an unforeseen condition which has been brought on by the functioning of a project. In the subject instance, no action would be required until the Chalmette levee is constructed, hence the levee project should be complete within itself. The application of the cost shifting principle violates the cardinal principle of incremental justification and could be utilized to bring an unfavorable benefit-cost ratio to above unity by having a completed project bear a part of the cost; however, such action would bring up many awkward funding problems, particularly where fully completed projects are involved.

Incl
Table I (dupe)

THOMAS J. BOWEN
Colonel, CE
District Engineer
NOTE (HEAD 21 MAR 66) 4th Inf

SUBJECT: Hurricane Protection - Lake Pontchartrain and Vicinity -
Chalmette Area

DA, Lower Miss. Valley Div, CP, Vicksburg, Miss. 33660 15 Jun 66

TO: Chief of Engineers ATKIN: ENSCY

1. I concur in the concern of the District Engineer.

2. This item was discussed with Major General R. C. MacDonald
   during the recent Coastal Inspection of IMB.

3. No further action is contemplated by this office.

1 Incl

1 Incl

FREDERICK T. DAVIS
Major General, USA
Division Engineer

Copy Furnished:
HEAD, ATKIN: ENSCY-EP

G.B. Davis
A.J. Davis
Col Clem
Gen Davis
TO: Division Engineer, Lower Mississippi Valley Division

The concern of the Division and District Engineers that the decision made in this case may have serious implications if applied to other projects in the future, is appreciated. However, this particular decision was based on those facts pertaining to the specific projects involved and it was not intended that it be considered a precedent with the principles thereof applicable to other projects. If any similar cases develop they will be treated independently and without regard to this decision.

FOR THE CHIEF OF ENGINEERS:

R. G. WOODBURY, JR.
Brigadier General, USA
Acting Director of Civil Works

CC: NEW ORLEANS DISTRICT

DA, Lower Miss. Valley Div, CE, Vicksburg, Miss. 39180 18 July 66

TO: District Engineer, New Orleans District, ATTN: LMVED

A.J.D.