

**MINUTES OF
SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY-EAST
ENGINEERING ADVISORY COMMITTEE MEETING
HELD ON SEPTEMBER 2, 2010**

PRESENT: Thomas Jackson, Chair
Stephen Estopinal, Vice Chair
Louis Wittie, Commissioner
George Losonsky, Commissioner
Robert A. Turner, Jr., SLFPA-E Regional Director
Gerry Gillen, Orleans Levee District (O.L.D.) Executive Director
Stuart Williamson, Lake Borgne Basin Levee District (LBBLD) Executive Director
Ricky Brouillette, Office of Coastal Protection and Restoration (OCPR)

The Engineering Advisory Committee met on September 2, 2010, in the Second Floor Hall of the Lake Vista Community Center, 6500 Spanish Fort Blvd., New Orleans, Louisiana. Chairman Thomas Jackson called the meeting to order at 1:30 p.m.

Opening Comments: None

Adoption of Agenda: The agenda was adopted as presented.

Approval of Minutes: The minutes of the August 5, 2010 Special Issues Committee meeting were approved.

Public Comments: None

Old Business:

A. Review and submittal of review of GNO HSDRRS WRDA 2007, Section 2035, Peer Review Plan Revised DRAFT.

Mr. Jackson advised that the comments reviewed at the Special Issues Committee meeting on August 5th were submitted to the U.S. Army Corps of Engineers (USACE); however, a response has not yet been received. Mr. Turner noted that a letter was received from the USACE stating that two projects were added to the peer review plan. Mr. Jackson explained that according to the policy that was received only two projects were cited as requiring peer review under WRDA; however, to his knowledge the USACE has peer reviewed more than two projects. He stated that he explained in a discussion with Colonel Sinkler that there are two major thrusts in the SLFPA-E's comments: 1) project vs. system (WRDA does not differentiate between a construction project and the system), and 2) scheduling (i.e., the SLFPA-E does not have access to peer review comments until the report is distributed by the Chief of Engineers).

The Committee suspended discussion on this item and moved to Item B.

B. Discussion of status of internal canals upon completion of lake barriers.

T. Robert Lacour, SLFPA-E General Counsel, explained that Mr. Jackson requested that he review the legal ramifications of the floodgates in the Orleans Avenue, London Avenue and 17th Street outfall canal permanent pump stations in connection with the operation of the pump stations and the internal canal floodwalls. He advised that Louisiana Revised Statutes (LA R.S.) 28:281 and 38:325 are old statutes that were created when the system was uniform. At that time levee districts took care of flood protection, and levee and drainage districts took care of flood protection and drainage. When the SLFPA-E was created in 2006, the Louisiana Legislature added R.S. 38:330.2 relative to levee districts. This statute references the terms “adequate drainage” and “gravity and pump drainage systems”; however, these references seem to be limited to relating to “tidewater flooding, hurricane protection and saltwater intrusion”. R.S. 38:330.2 A (2) (b) states, “Nothing in this Paragraph shall transfer authority to operate flood control pump operations from any public entity authorized by law to conduct such activities.” He advised that there is no statutory authority vesting responsibility for the levees with the Sewerage and Water Board (S&WB). LA R.S. 33:4071 (A) (1) provides that “the public water system, the public sewerage system, and the public drainage system in the city of New Orleans shall be constructed, controlled, maintained, and operated by a sewerage and water board...” This statute does not address responsibility for the maintenance and construction of levees in the city of New Orleans. LA R.S. 38:307 gives the Board of Commissioners of the Orleans Levee District “full and exclusive right, jurisdiction, power and authority to ... construct, maintain and improve levees...” In addition, a Federal district court held that the S&WB does not have any responsibility for levees.

Mr. Lacour further advised that the levees along the outfall canals are a part of the Federal hurricane protection system, and that as long as these levees are a part of that system, the levee districts are obligated to maintain the floodwalls. He pointed out, however, that Congress could de-authorize the floodwalls. He added that he spoke to a member of the USACE who advised that the USACE is not seeking to have the levees de-authorized at the present time and that de-authorization would be a long process. Mr. Lacour stated that if the floodwalls are not de-authorized, he did not think that there was any legal chance that the SLFPA-E could force the S&WB to take responsibility for the floodwalls. However, if the floodwalls are de-authorized, the SLFPA-E would have a chance to transfer this responsibility. He suggested that a better approach may be a cooperative endeavor agreement with the S&WB. Mr. Lacour explained that the USACE seems to think that the S&WB should operate the gates fronting the new permanent pump stations. He suggested that the floodwalls could be included in that they are a part of the entire system and that the entire system should be operated by one operator. He noted that any agreement with the S&WB must be made with the Coastal Protection and Restoration Authority (CPRA), which is the local sponsor. The issues that should be addressed in any such agreement concern the control and maintenance of the gate and the control and maintenance of the floodwalls. He cautioned that should the S&WB take over the responsibility for the floodwalls, a cooperative endeavor agreement would be required since the levee districts have a non-transferable servitude for the levees/floodwalls. The servitudes are held by the levee districts by the St. Julien doctrine.

Mr. Lacour explained that the USACE advised that the permanent pump stations will be completed in about four years. He anticipated that the CPRA's attorney will ask for direction concerning the operation of the gates and floodwalls. Mr. Jackson pointed out that closure of the gates must be closely coordinated with the interior pumping and lake levels; however, the SLFPA-E has a responsibility for ensuring that the protection system is closed. Mr. Lacour asked from a legal point of view that the Committee formulate the SLFPA-E's optimum recommendations. He indicated that these optimum recommendations could be used in negotiations and legislative efforts during the next four years. Mr. Gillen requested that the frontal protection for the other pump stations also be reviewed and considered in this process.

Mr. Estopinal offered a motion, which was seconded by Mr. Wittie and unanimously adopted, that Mr. Lacour provide the briefing presented today to the Board at its next meeting.

A. Review and submittal of review of GNO HSDRRS WRDA 2007, Section 2035, Peer Review Plan Revised DRAFT.(continued)

The Committee continued its discussion of Item A.

Mr. Jackson explained that he requested the American Society of Civil Engineers (ASCE) to review the comments on the New Orleans District policy. The ASCE's Inner Institute Committee on Levees originally drafted the wording for peer review. It was indicated that the ASCE's Committee will not become involved in the policy for the New Orleans District. James Dalton, USACE Chief of Engineering and Construction, provided a copy of the national policy, which was distributed to the members of the Committee for their review. The two big issues picked up by the ASCE based on SLFPA-E discussions concerned access by the local sponsor to the process and the definition of project vs. system. Mr. Dalton and John Duran of the ASCE have indicated that it was their understanding that a policy was developed specifically for the New Orleans District because of all of the current on-going work. The Committee reviewed comments on the New Orleans District policy at the last Special Issues Committee meeting. He stated that Colonel Sinkler advised that the USACE is reviewing the SLFPA-E's comments and indicated that SLFPA-E may have some reasonable issues.

C. Discussion of corrosion protection of St Bernard T-Wall pilings.

Mr. Jackson reported that he and Mr. Estopinal met with representations of the USACE and CPRA. It was agreed at that meeting that the USACE would conduct an accelerated peer review on the corrosion issue. Mr. Estopinal commented that the most important thing that came out of the meeting is that perhaps a realistic understanding will be achieved of what will need to be done operations and maintenance-wise (O&M) to maintain the system. However, whether the levee districts will be able to fund this O&M cost is another issue. Mr. Jackson stated that Col. Sinkler had indicated that the USACE is acting in accordance with the Federal Design Manual for corrosion in using sacrificial steel. If the results of the peer review reveal that the pilings need to be coated, a variance will be needed from USACE headquarters to change the requirement

in the contracts from sacrificial steel to coal tar epoxy coating. He stated that Col. Sinkler was willing to take this action, depending on the results of the peer review. Mr. Brouillette pointed out that the current waiver signed by the General states that if scheduling is not an issue, the piling shall be coated. He added that the CPRA's expert, Jim Bushman, proposed some ideas on how to make scheduling not be an issue. Mr. Jackson commented that a field coating operation could be set up for a large quantity of piling and sheetpile. Mr. Turner commented that an important factor that should be considered in any decision dealing with a large scale project is the risks associated with the project itself.

Mr. Losonsky commented that at the Special Issues Committee meeting last month it was stated that any measures that could be taken to remediate this problem for the remainder of the project would be taken. John Greishaber with the USACE advised that LPV 145 will be completed by October, and that LPV 146 is approximately 50 percent complete and LPV 148 is approximately 30 percent complete.

Mr. Jackson stated that Col. Sinkler and Mr. Greishaber had both advised that when developing the typical section for the floodwall design there were many things for which the USACE took a conservative view and approach. The SLFPA-E is questioning one aspect of the cross section.

D. Discussion of surveys along 17th Street Canal (Orleans side).

Mr. Gillen advised that surveys are being conducted by the State of Louisiana for the permanent pump stations. Mr. Jackson recommended that the neighborhood associations be advised.

New Business:

A. Discussion of the Inner Harbor Navigation Canal (IHNC) water storage capacity.

Mr. Estopinal explained his concern relative to the IHNC water storage capacity. The top of the IHNC surge barrier is at elevation 26-ft. The barge gate is scheduled to be closed when the water level reaches a 3-ft. elevation; however, realistically, it may not be closed until the water level reaches an elevation 4 or 5-ft. because of navigation and other issues. Water will be pumped into the sealed basin, in addition to the direct rainfall. The issue concerns the height of the overtopping surge and the length of time that the IHNC surge barrier is overtopped. Mr. Jackson commented that a meeting should be held with the proper USACE personnel to review the calculations.

Mr. Greishaber explained that the USACE calculated that for a 100-year storm surge event the water elevation in the IHNC corridor will rise to an elevation of 8-ft. This calculation takes into account the 100-year design storm, the 100-year storm's duration and the rainfall for a 100-year storm. The IHNC floodwalls are designed for water to reach the top of the walls at elevation 12-ft. He explained that a phenomenon takes place as a storm surge approaches. The water elevation in Lake Borgne rises quickly; however, Lake Pontchartrain acts a significant sump with water having to flow through Seabrook and the Rigolets and Chef Passes. Therefore, there is a big lag between

Lake Borgne and Lake Pontchartrain; however, there will still be water running into Lake Pontchartrain. The intent is to lock out all of the water at elevation 3-ft. The water level will start at elevation 3-ft. in the IHNC corridor and will impound to elevation 8-ft. for a 100-year storm. There will be four feet of freeboard. The USACE is developing a water control plan. The Seabrook Complex will be closed so as to maintain the water in the corridor at elevation 3-ft. The Seabrook gate will not be closed as long as water is flowing out of the corridor. The plan is to operate with the corridor at elevation 3-ft. and all of the designs are based on an increase from an elevation of 3-ft.

Mr. Estopinal stated that he would like to see the hydrographs. Mr. Greishaber offered to meet one-on-one with Board members and take them through the entire process. Mr. Turner advised that he was in the process of setting up a Web-Ex presentation to address the statistical parts of the process and to deal with some of the issues pertaining to overflow rates for the 90 percent confidence level. He offered to add the issues being discussion by the Committee to this presentation. Mr. Jackson requested that Mr. Turner coordinate the presentation.

B. Status of safe houses for the Lake Borgne Basin Levee District (LBBLD).

Mr. Williamson explained that the LBBLD has estimated the cost of the safe house project and other pump station maintenance issues to be approximately \$5.5 million. In an emergency LBBLD personnel will be housed in a secured space at Domino's Sugar in Arabi, Louisiana. Mr. Turner advised that several potential funding sources are being investigated for one or two LBBLD safe houses.

There was no further business; therefore, the meeting was adjourned at 2:43 p.m.