



DEPARTMENT OF THE ARMY
MISSISSIPPI VALLEY DIVISION, CORPS OF ENGINEERS
P.O. BOX 80
VICKSBURG, MISSISSIPPI 39181-0080

REPLY TO
ATTENTION OF:

CEMVD-PD-N

19 Oct 2011

MEMORANDUM FOR Commander, Vicksburg District

SUBJECT: Review Plan Approval for Decision and Implementation Documentation for New Orleans to Venice (NOV) Hurricane and Storm Damage Risk Reduction System, Plaquemines Parish, Louisiana

1. References:

a. EC 1165-2-209, Civil Works Review Policy, 31 Jan 2010.

b. Memorandum, CEMVK-PP-D, 28 Sep 2011, subject: SAB (encl 1)

c. Memorandum, CEIWR-RMC, 26 Sep 2011, subject: Risk Management Center Endorsement - New Orleans to Venice Hurricane and Storm Damage Risk Reduction System Review Plan (encl 2).

2. I hereby approve subject Review Plan (RP) as enclosed and concur in the conclusion that an independent external peer review (IEPR) of this project is necessary. As the proposed RP represents a modified Type II IEPR containing elements of Type I and Type II IEPR, the RP has been coordinated with the Coastal Storm Damage Reduction Planning Center of Expertise (CSDR-PCX) and the Risk Management Center (RMC), Western Division and both endorse approval. The RP has been prepared in accordance with EC 1165-2-209 and complies with all applicable policies and provides an adequate independent technical review of the plan formulation, engineering and environmental analyses, and other aspects of the plan development. As the RP is a living document, it should be monitored and amended as appropriate to incorporate additional review requirements if the project moves into the implementation phase. Non-substantive changes to this RP do not require further approval.

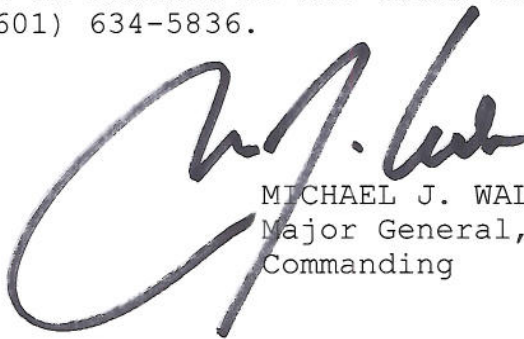
3. The District should post the RP to its web site and provide a link to the CSDR-PCX and the RMC for their use.

CEMVD-PD-N

SUBJECT: Review Plan Approval for Decision and
Implementation Documentation for New Orleans to Venice (NOV)
Hurricane and Storm Damage Risk Reduction System,
Plaquemines Parish, Louisiana

4. The MVD point of contact is Mr. Brian Chewning,
CEMVD-PD-N, at (601) 634-5836.

2 Encls



MICHAEL J. WALSH
Major General, USA
Commanding

CF:

CEMVN-PM-OF (LeBlanc)

CEMVK-PP-D (Eagles)

CENAB-PL-P (Robbins)

CEIWR-RMC-Western Division (Krumdieck)

CECW-MVD



DEPARTMENT OF THE ARMY

VICKSBURG DISTRICT, CORPS OF ENGINEERS
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 391833435

REPLY TO
ATTENTION OF:

28 SEP 2011


CEMVK-PP-D (1110-2-1150a1)

MEMORANDUM FOR Commander, Mississippi Valley Division
(CEMVD-PD-N)

SUBJECT: Review Plan Approval for Decision and Implementation Documentation for New Orleans to Venice (NOV) Hurricane and Storm Damage Risk Reduction System, Plaquemines Parish, Louisiana

1. Subject Review Plan is enclosed and has been prepared in accordance with EC 1165-2-209 (encl 1).
2. The Review Plan has been coordinated with the Flood Risk Management Center of Expertise and the Risk Management Center (RMC). Memorandum, CEIWR-RMC, 26 September 2011, subject: Risk Management Center Endorsement - New Orleans to Venice Hurricane and Storm Damage Risk Reduction System Review Plan, recommends approval of the Review Plan (encl 2).
3. CEMVK, acting as the execution office in coordination with CEMVN, recommends approval of the Review Plan.

2 Encls


JEFFREY R. ECKSTEIN
Colonel, Corps of Engineers
Commanding

Encl 1

FINAL REVIEW PLAN

FOR
DECISION AND IMPLEMENTATION DOCUMENTATION
NEW ORLEANS TO VENICE (NOV)
HURRICANE AND STORM DAMAGE
RISK REDUCTION SYSTEM
PLAQUEMINES PARISH, LOUISIANA

SEPTEMBER 2011

U.S. ARMY CORPS OF ENGINEERS
VICKSBURG DISTRICT
VICKSBURG, MISSISSIPPI

MSC Approval Date: Pending
Last Revision Date: 12 September 2011



US Army Corps
of Engineers®

DRAFT REVIEW PLAN
 FOR
 DECISION AND IMPLEMENTATION DOCUMENTATION
 NEW ORLEANS TO VENICE
 HURRICANE AND STORM DAMAGE RISK REDUCTION SYSTEM
 PLAQUEMINES PARISH, LOUISIANA

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<u>No.</u>	<u>Title</u>
1	STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS
2	NEW ORLEANS TO VENICE REVIEWS SCHEDULE, 12 SEP 11
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DRAFT REVIEW PLAN
FOR
DECISION AND IMPLEMENTATION DOCUMENTATION
NEW ORLEANS TO VENICE
HURRICANE AND STORM DAMAGE RISK REDUCTION SYSTEM
PLAQUEMINES PARISH, LOUISIANA

1. PURPOSE AND REQUIREMENTS

a. Purpose. This Review Plan defines the scope and level of review, including peer review, for the New Orleans to Venice (NOV) Hurricane Protection Project in Plaquemines Parish, Louisiana, as well as a project to incorporate certain non-Federal levees (NFL) into the NOV Project. Products for review include a Project Information Report and Abbreviated Project Information Report (PIR/APIR--this is a single document) for the existing NOV Project and a Project Description Document (PDD) for the NFL Project (decision documents), along with supporting National Environmental Policy Act (NEPA) documentation (Supplemental Environmental Impact Statement (SEIS) for the NOV Project and an EIS for the NFL Project). Implementation products for review include plans and specifications (P&S) submissions and design documentation reports.

b. References.

- (1) Engineer Circular (EC) 1165-2-209, "Civil Works Review Policy," 31 January 2010.
- (2) EC 1105-2-407, "Assuring Quality of Planning Models," 31 May 2005.
- (3) EC 1105-2-412 , "Assuring Quality of Planning Models," 12 March 2011.
- (4) Engineer Regulation (ER) 1110-2-12, "Quality Management," 30 September 2006.
- (5) ER 1105-2-100, "Planning Guidance Notebook, Appendix H, Policy Compliance Review and Approval of Decision Documents, Amendment #1," 20 November 2007.
- (6) Project Management Plan (PMP) for NOV Hurricane and Storm Damage Reduction System.
- (7) Hurricane and Storm Damage Risk Reduction System Quality Management Plan, 30 October 2009.
- (8) Task Force Hope Peer Review Plan, October 2008.

c. Requirements. This Review Plan was developed in accordance with EC 1165-2-209 which establishes an accountable, comprehensive, life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design; construction; and operation, maintenance, repair, replacement, and rehabilitation (OMRR&R). The EC outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review. In addition to these levels of review, decision documents are subject to cost engineering review and certification (per EC 1165-2-209) and planning model certification/approval (per EC 1105-2-412).

(1) District Quality Control. All decision and implementation documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. The DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the PMP. The assigned District shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home Major Subordinate Command (MSC).

(2) ATR. The ATR is mandatory for all decision and implementation documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published U.S. Army Corps of Engineers (USACE) guidance and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. The ATR is managed within USACE by the Risk Management Center (CEIWR-RMC) with support provided by the Coastal Storm Damage Reduction Planning Center of Expertise (PCX) and is conducted by a qualified team from outside the home District that is not involved in the day-to-day production of the project/product. The ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. To assure independence, the leader of the ATR team shall be from outside the home MSC.

(3) IEPR. The IEPR may be required for decision documents under certain circumstances. The IEPR is the most independent level of review and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside the USACE is warranted. A risk-informed decision, as described in EC 1165-2-209, is made as to whether IEPR is appropriate. The IEPR panels will consist of independent, recognized experts from outside the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted. The IEPR is generally for feasibility and reevaluation studies and modification reports with Environmental Impact Statements (EIS). The IEPR is managed by an Outside Eligible Organization (OEO) that is described in Internal Revenue Code Section 501(c)(3) is exempt from Federal tax under Section 501(a) of the Internal Revenue Code of 1986, is independent, is free from conflicts of interest, does not carry out or advocate for or against Federal water

resources projects, and has experience in establishing and administrating IEPR panels. The scope of review will address all the underlying planning and engineering, including safety assurance, economics, and environmental analyses performed, not just one aspect of the project. There are two types of IEPR: Type I is generally for decision documents, and Type II is generally for implementation products. A determination was made based on coordination with the MSC and RIT that a Type I IEPR is not required for this effort since no decision documents are being forwarded for authorization. However, given the fact that an EIS and SEIS are being prepared, a modified Type II IEPR was recommended which would incorporate aspects of the NEPA requirements into the review process. The existing Peer Review Plan (PRP) for implementation of Section 2035 of the Water Resources Development Act (WRDA) of 2007 for the Greater New Orleans Hurricane and Storm Damage Risk Reduction System (HSDRRS) (Type II IEPR) covers design and construction efforts underway for the 100-year system.

(a) Type I IEPR. Type I IEPR reviews are managed outside the USACE and are conducted on project studies. Type I IEPR panels assess the adequacy and acceptability of the economic and environmental assumptions and projections, project evaluation data, economic analysis, environmental analyses, engineering analyses, formulation of alternative plans, methods for integrating risk and uncertainty, models used in the evaluation of environmental impacts of proposed projects, and biological opinions of the project study. Type I IEPR will cover the entire decision document or action and will address all the underlying engineering, economic, and environmental work, not just one aspect of the study. For decision documents where a Type II IEPR (Safety Assurance Review [SAR]) is anticipated during project implementation, safety assurance shall also be addressed during the Type I IEPR per EC 1165-2-209.

(b) Type II IEPR. Type II IEPR, or SAR, is managed outside the USACE and is conducted on design and construction activities for hurricane, storm, and flood risk management projects or other projects where existing and potential hazards pose a significant threat to human life. Type II IEPR panels will conduct reviews of the design and construction activities prior to initiation of physical construction and, until construction activities are completed, periodically thereafter on a regular schedule. The reviews shall consider the adequacy, appropriateness, and acceptability of the design and construction activities in assuring public health safety and welfare.

(4) Policy and Legal Compliance Review. All decision documents will be reviewed throughout the study process for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy and warrant approval or further recommendation to higher authority by the Chief of Engineers. The DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies, particularly policies on analytical methods and the presentation of findings in decision documents.

(5) Cost Engineering Review and Certification. All decision documents shall be coordinated with the Regional Cost Engineer for review and certification. The Regional Cost Engineer will determine the appropriate level of approval in coordination with the Cost Engineering Center of Expertise and oversee conduct of the cost ATR.

(6) Model Certification/Approval. EC 1105-2-412 mandates the use of certified or approved models for all planning activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. Planning models, for the purposes of the EC, are defined as any models and analytical tools that planners use to define water resources management problems and opportunities, formulate potential alternatives to address the problems and take advantage of the opportunities, evaluate potential effects of alternatives, and support decisionmaking. The use of a certified/approved planning model does not constitute technical review of the planning product. The selection and application of the model and the input and output data are still the responsibility of the users and are subject to DQC, ATR, and IEPR. EC 1105-2-412 does not cover engineering models used in planning. The responsible use of well-known and proven USACE-developed and commercial engineering software will continue, and the professional practice of documenting the application of the software and modeling results will be followed. Use of engineering models is also subject to DQC, ATR, and IEPR.

2. REVIEW MANAGEMENT ORGANIZATION (RMO) COORDINATION

a. The RMO is responsible for managing the overall review effort described in this Review Plan. The RMO for this work is CEIWR-RMC with Mr. Colin Krumdieck as the point of contact. Support is being provided by the Coastal Storm Damage Reduction PCX with Mr. Lawrence Cocchieri as the point of contact.

b. The RMO or its designee will coordinate as needed with the Regional Cost Engineer to conduct ATR of cost estimates, construction schedules, and contingencies. The RMO will also coordinate with other PCX as appropriate for review of project decision documents or supporting documentation as appropriate. As outlined in the Quality Management Plan for the Greater New Orleans HSDRRS, approval of decision documents (PDD and PIR/APIR) has been delegated to the Mississippi Valley Division (CEMVD) Commander. Additionally, execution authority for NEPA documents has been delegated to the CEMVD Commander as part of the guidance following the supplemental appropriations.

3. PROJECT INFORMATION

a. Decision Document.

(1) The NOV project is a Federally funded project designed to increase flood risk reduction in Plaquemines Parish from St. Jude to Venice. The original authorization, Section 203 of the Flood Control Act of 1962, Public Law 87-874 (76 Stat. 1173), authorized the Secretary of the Army to construct the project for hurricane-flood risk reduction in the

Mississippi River Delta at and below New Orleans. It is officially referred to as the New Orleans to Venice Hurricane Protection Project. Supplemental authorization and funding were received under the Flood Control and Coastal Emergencies (FC&CE) heading, Chapter 3, Title I, Division B, of Public Law 109-148 (119 Stat. 2762–2763) (3d FC&CE Supplemental); under the FC&CE heading, Chapter 3, Title II, of Public Law 109-234 (120 Stat. 454-455) (4th FC&CE Supplemental); under the FC&CE heading, Chapter 3, Title III, of Public Law 110-252 (122 Stat. 2349-2350) (6th FC&CE Supplemental); and under the FC&CE heading, Chapter 3, Title I, Division B, of Public Law 110-329 (122 Stat. 3590) (7th FC&CE Supplemental) which authorized the Secretary of the Army, at full Federal expense, to repair and restore the original NOV project to provide the level of risk reduction (LORR) for which it was designed, accelerate completion of unconstructed portions of the NOV project, and armor critical elements of the NOV project. This work will be documented in a PIR/APIR for the project to be approved by the CEMVD Commander. An SEIS will be prepared to document construction impacts of the NOV project culminating in a Record of Decision (ROD) to be executed with approval of the PIR/APIR.

(2) The 4th and the 6th FC&CE Supplementals authorized the Secretary of the Army to replace or modify certain NFLs in Plaquemines Parish and to incorporate into the Federal NOV project such levees. This work will be documented in a PDD to be approved by the CEMVD Commander with an accompanying EIS that documents the associated project impacts. This will also be accompanied by an ROD to be executed with approval of the PDD.

(3) There is no authority to raise existing east bank non-Federal levee features or to include them in the NOV Federal Hurricane Protection System. The non-Federal authority above is for the existing west bank NFL features only.

b. Project Description.

(1) The NOV Project includes the east bank back levees from Phoenix, Louisiana (approximately 28 miles southeast of New Orleans), to Bohemia, Louisiana, and the west bank back levees and Mississippi River Levees (MRL) from St. Jude, Louisiana (approximately 39 miles south of New Orleans), to Venice, Louisiana. In addition, the NFL Project includes 32 miles of west bank non-Federal back levees and 2 miles of new levees from Oakville to St. Jude to be incorporated into the NOV Project. Both levee projects are being designed to the 2 percent chance of exceedance or 50-year elevation based on updated hurricane models developed following Hurricane Katrina. It should be noted there are other levees within both the NFL and NOV project areas that do not meet these elevation requirements and will not be addressed because of either funding or authorization issues; therefore, the 2 percent LORR cannot be assumed for the entire project areas.

(2) Figure 1 shows the existing Federal west bank levee features, the existing Federal east bank levee features, and the existing west bank NFL features authorized to be constructed.

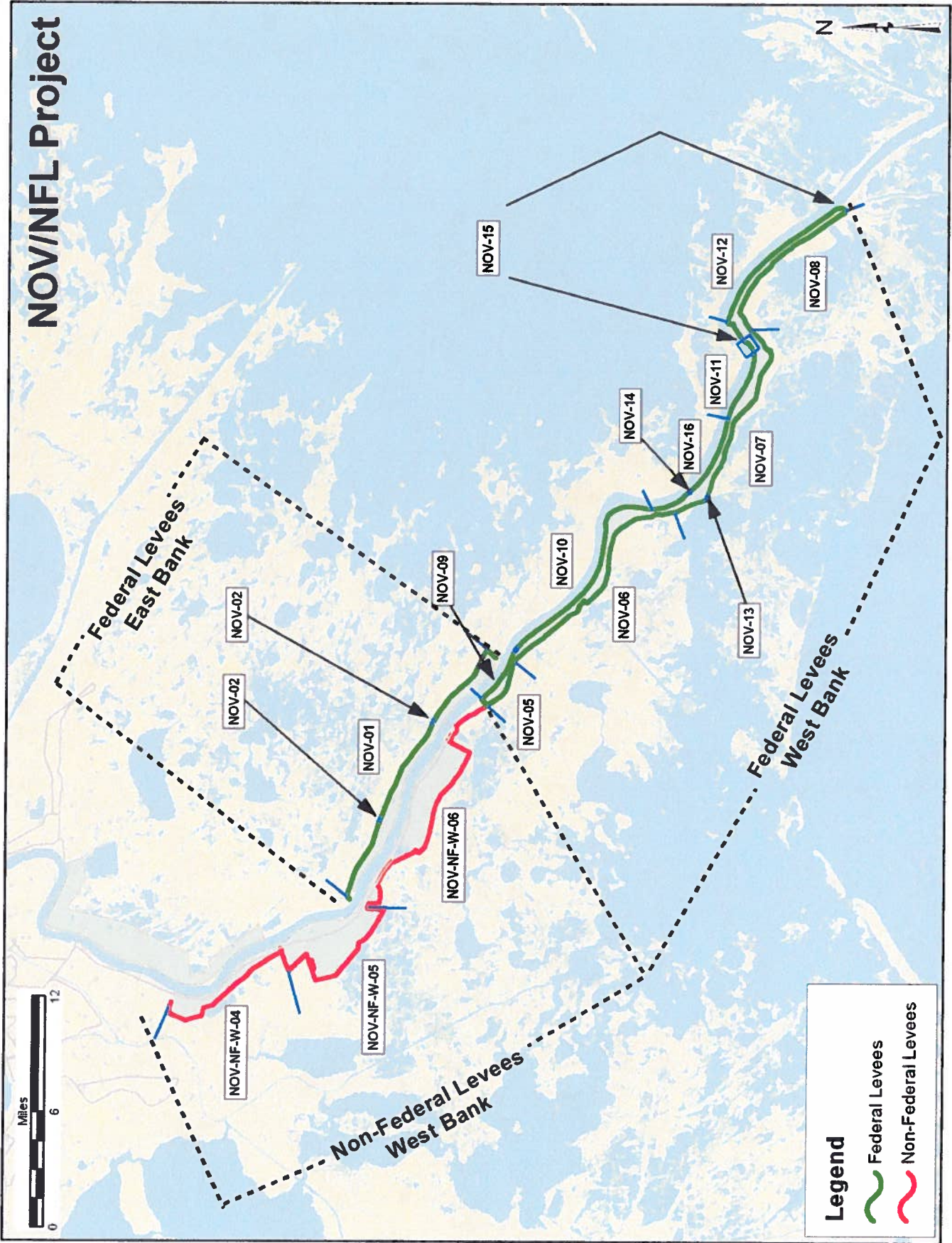


Figure 1

(3) In February 2010, cost estimates were developed to ascertain whether funding levels for the NOV and NFL Projects were sufficient to complete the work based on new design elevations. The previous levee designs were based on storm surge from specific events resulting in inconsistent LORR when analyzed using the updated hurricane models developed since Hurricane Katrina. These estimates indicated that funding was not sufficient to build everything authorized for these projects.

(4) The CEMVD Commander directed the Project Delivery Team (PDT) to develop a course of action for application of the available project funds and in July 2010, he approved the following recommendations:

(a) For NFL, the project will be constructed from north to south terminating in a tie-in to the MRL at a point determined through funding availability. Currently, this is anticipated to be at a point in the third project reach (NF-W-06) south of the Myrtle Grove Marina Estates where the back levee changes direction moving farther west away from Highway 23.

(b) For NOV, priority was given to completing a back levee line of defense along with fronting protection for pump stations along the east bank back levees. This includes reaches NOV 02, 05, 06, 07, 08, and 13. Additional funding is anticipated to be available which will be applied to the MRL closure at the Empire Lock (NOV 14). Depending on bid prices, other features will be added if funding permits. Design to 100 percent is planned for each of the aforementioned items as well as NOV 16 which was next on the list. Other items will be designed to 35 percent in order to develop reliable cost estimates if funding stretches further than anticipated. Figure 2 depicts the approved course of action as described above.

c. Factors Affecting the Scope and Level of Review. An EIS and SEIS will be prepared for the proposed projects; therefore, a Modified Section 2035 IEPR is necessary for the decision documents as described above.

(1) The type of construction is typical for the New Orleans HSDRRS. Other than some geotechnical considerations, the PDT did not encounter any unusually challenging aspects or out of the ordinary work while preparing project documentation.

(2) Preliminary assessment of project risks. The PDT identified the following items that present a risk of impacting the project cost and schedule: acquiring necessary property from private landowners, market conditions that affect unit prices for both borrow material and contract labor, and work stoppages and storm damage during hurricane season.

(3) Cultural features have been identified throughout the project area. Some are within the footprint of the proposed levee enlargements and will be examined prior to construction; however, they are not anticipated to significantly affect project design and construction.

(4) The project is not considered to be “highly controversial.” It reduces the risk of hurricane storm damage in an area subject to repetitive flooding; negative environmental impacts are limited; and mitigation will be provided for unavoidable impacts. Some resistance from residents in the immediate vicinity of construction is anticipated, but such resistance is not considered likely to push the project to a point of being “highly controversial.”

d. In-Kind Contributions. Products and analyses provided by non-Federal sponsors as in-kind services are subject to DQC, ATR, and IEPR. The sponsors will be given opportunities to comment on project design and implementation documents; however, at this time, no in-kind products and analyses will be provided by the non-Federal sponsor.

4. DISTRICT QUALITY CONTROL (DQC)

a. Decision Documents. The DQC for the PDD and PIR/APIR will be accomplished in accordance with District and Division guidelines.

b. Implementation Documents.

(1) Design Quality. A Design Quality Assurance Plan (DQAP) was approved for these projects on 11 November 2008. This plan was revised with the new DQAP approved on 7 June 2011. Based on the DQAP, a Design Quality Control Plan (DQCP) is prepared for each design item, including levee enlargements, floodwalls, and pump station fronting protection, and is archived in ProjectWise.

(2) System Consistency Review (SCR). As part of the design quality process, an SCR is held for each design feature to include all P&S submittals. This includes Soils Reports, 35, 65, and 95 percent Design. The SCR is basically a check to make sure the design products are consistent with the HSDRRS design criteria as applied throughout the system. DrChecks review software will be used to document all SCR comments, responses, and associated resolutions accomplished throughout the review process. All SCR reviews will be archived in ProjectWise.

5. AGENCY TECHNICAL REVIEW (ATR)

a. Products to Undergo ATR.

(1) Review of decision documents (PDD and PIR/APIR) includes ATR of the cost estimates for the construction that is approved by the CEMVD Commander. This process is managed through the Regional Cost Engineer and has been in place through design and construction of the entire Greater New Orleans HSDRRS. The Regional Cost Engineer will handle all coordination with the Cost Engineering Center of Expertise, if required. The ATR of NEPA documents used to prepare the PDD and PIR/APIR was previously performed by team members from CEMVM in coordination with ATR Lead (reference paragraph 5.c.(7)). The ATR of design information used to develop the PDD and PIR/APIR has also been completed; therefore, a full ATR of the PDD and PIR/APIR is not required. This is the same process used for review of the other PDDs and PIR/APIRs that have been approved by CEMVD for HSDRRS.

(2) Design documents (P&S) and Design Documentation Reports (DDR) at the 65 percent design submission level will undergo a formal ATR. Design document ATRs will be accomplished through CESWD personnel (primarily from Tulsa District).

b. Required ATR Team Expertise. The ATR Lead is required to be from outside MSC and for these projects is located at CENAP. Memphis and Tulsa Districts, along with other Corps assets, will provide ATR for both the Federal and non-Federal levee systems. Table 1 lists the disciplines required for ATR team members.

TABLE 1
ATR TEAM MEMBERS

ATR Team Member Disciplines	Expertise Required*
ATR Lead**	ATR lead will be from outside the MSC, will be well versed in project planning and execution principles, and should have experience in leading project teams through the planning engineering and design (PED) project phase.
Planning	Team member is familiar with watershed level projects, current flood damage reduction planning, and policy guidance and has experience in plan formulation.
Environmental Resources	Team member should have extensive experience in NEPA requirements, cultural resources, recreational resources, and hazardous, toxic, and radiological wastes (HTRW).
Hydraulic Engineering and Coastal Hydrology	Team member is experienced in the field of coastal hydrology and hydraulics; has a thorough understanding of the dynamics of hurricane storm systems; has an understanding of computer modeling techniques used for this project; has experience in the analysis and design of levees, floodwalls, and other flood protection systems; and is familiar with the USACE application of risk and uncertainty analyses in flood damage reduction studies.
Geotechnical Engineering	Team member should have a thorough understanding of soils and soils analysis, especially in the area of coastal environments.
Civil Engineering	Team member should have experience in utility relocations, internal drainage, construction, project engineering, levee, and operations.
Structural Engineering	Team member is familiar with pump station, floodwall, and closure structure design elements including HSDRRS guidelines.
Electrical/Mechanical Engineering	Team member is familiar with pump station and closure structure design.

TABLE 1 (Cont)

ATR Team Member Disciplines	Expertise Required
Cost Engineering	Team member is familiar with cost estimating for similar projects using MCACES.
Real Estate	Team member should have extensive experience in acquisition and leasing including right of way issues and appraisals.

* All ATR team members have an engineering or equivalent degree in their field of expertise, at least 15 years of experience, and are registered professionals in the United States.

** Typically, the ATR Lead will also serve as a reviewer for a specific discipline (such as planning, economics, environmental resources, etc).

c. Documentation of ATR.

(1) DrChecks review software will be used to document all ATR comments, responses, and associated resolutions accomplished throughout the review process. Comments should be limited to those that are required to ensure adequacy of the product. The four key parts of a quality review comment will normally include:

(a) The review concern – identify the product’s information deficiency or incorrect application of policy, guidance, or procedures.

(b) The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not been properly followed.

(c) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability.

(d) The probable specific action needed to resolve the concern – identify the action(s) that the reporting officers must take to resolve the concern.

(2) In some situations, especially addressing incomplete or unclear information, comments may seek clarification in order to then assess whether further specific concerns may exist.

(3) The ATR documentation in DrChecks will include the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the District, RMO, MSC, and HQUSACE), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR

team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-1-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution.

(4) At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

(a) Identify the document(s) reviewed and the purpose of the review.

(b) Disclose the names of the reviewers and their organizational affiliation and include a short paragraph on both the credentials and relevant experiences of each reviewer.

(c) Include the charge to the reviewers.

(d) Describe the nature of their review and their findings and conclusions.

(e) Identify and summarize each unresolved issue (if any).

(f) Include a verbatim copy of each reviewer's comments (either with or without specific attributions) or represent the views of the group as a whole, including any disparate and dissenting views.

(5) The ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team).

(6) Two ATR certifications will be issued for design documents (P&S and DDRs)--one for the NFL Project representing three project reaches and one for the NOV Project representing six project reaches or items. Certification will be by the Risk Management Center and will represent design up to the 95 percent submission for P&S to assure ATRs are completed prior to initiation of biddability, constructibility, operability, and environmental reviews in accordance with ER 1110-1-12. If certain items are projected for award prior to certification of each project, interim certification can be provided by the Coastal Storm Damage Reduction PCX in support of the Risk Management Center and will be incorporated into the overall project certification. A sample Statement of Technical Review is attached (Attachment 1).

(7) The ATR for the NEPA documents has been completed and certification will be provided by the Coastal Storm Damage Reduction PCX in support of the Risk Management Center. Certification of ATR for cost estimates will be provided by the Regional Cost Engineer. These certifications, along with ATR Certification of design information used to develop the PDD and PIR/APIR, will be incorporated into the documents for approval by the CEMVD Commander.

6. INDEPENDENT EXTERNAL PEER REVIEW (IEPR)

a. Decision on IEPR. Through coordination with the District Support Team and Regional Integration Team, it was determined that a modified Section 2035 IEPR will be required for the Plaquemines Parish levees projects due to the requirement to prepare as SEIS for the restoration and completion of the NOV project and an EIS for the incorporation of certain NFLs in Plaquemines Parish into the existing NOV project. The IEPR will include limited alternatives addressed in the SEIS/EIS and design assumptions made during development of the PDD and PIR/APIR documents as required.

b. Products to Undergo Modified Type II IEPR. Since this is not a feasibility study, no authorization decision needs to be made; therefore, a Type I IEPR is not necessary. The PDD and PIR/APIR documents, with associated NEPA documents, will be reviewed in the context of decision documents to be approved at the MSC level. Similarities with the Type I IEPR exist due to the environmental aspects of the documents and the NEPA process. Design documentation will undergo a more traditional SAR review as with typical Type II IEPR products. A representative sample of the reaches and structures in the NOV and NFL Projects will be reviewed during design and construction. Specific items to be reviewed will depend on ongoing design and construction activities and will be selected by the review team in coordination with the RMO and the Districts. Site visits will also be made to the sample reaches and structures during construction.

c. Modified Type II IEPR Guidelines.

(1) The RMO will prepare the charge to the reviewers containing the instructions regarding the objective of the peer review and the specific advice sought. Reviewers shall be charged with reviewing scientific and technical matters, leaving policy determinations for USACE and the Army. The charge should specify the structure of the review comments to fully communicate the reviewer's intent by including the comment, why it is important, any potential consequences of failure to address, and suggestions on how to address the comment. It should include specific technical questions while also directing reviewers to offer a broad evaluation of the overall document. The charge should be determined in advance of the selection of the reviewers.

(2) The District will provide reviewers with sufficient information, including background information about the project to enable them to understand the data, analytic procedures, and assumptions. Reviewers shall be informed of applicable access, objectivity, reproducibility, and other quality standards under the Federal laws governing information access and quality. Information distributed for review must include the following disclaimer: "This information is distributed solely for the purpose of pre-dissemination review under applicable information quality guidelines. It has not been formally disseminated by USACE. It does not represent and should not be construed to represent any agency determination or policy."

d. The panel of experts established for a review for a project shall:

(1) Conduct the review for the subject project in a timely manner in accordance with the study and RP schedule.

(2) Follow the “Charge,” but when deemed appropriate by the team lead, request other products relevant to the project and the purpose of the review.

(3) Receive from USACE any public written and oral comments provided on the project.

(4) Provide timely written and oral comments throughout the development of the project, as requested.

(5) Assure the review avoids replicating an ATR and focuses on the questions in the “Charge,” but the panel can recommend additional questions for consideration. The IEPR panel may recommend to the RMO additional or alternate questions.

(6) Offer any lessons learned to improve the review process.

(7) Submit reports in accordance with the review plan milestones.

(8) The team panel lead shall be responsible for ensuring that comments represent the group, be nonattributable to individuals, and where there is lack of consensus, note the nonconcurrence and why.

e. Record of Review. The review team will prepare a review report in two parts. Part I will describe the results of the review for the PDD and PIR/APIR with associated NEPA documents. Part II will describe the results of the review for design and construction of selected items. Part I will be finalized following the review of the associated documents, and Part II will be finalized following review during design and construction. Together they will comprise a summary review for the total project development process. All review panel comments shall be entered as team comments that represent the group and be nonattributable to individuals. The team lead is to seek consensus, but where there is a lack of consensus, note the nonconcurrence and why. A suggested report outline is an introduction, the composition of the review team, a summary of the review during design, a summary of the review during construction, any lessons learned in both the process and/or design and construction, and appendixes for conflict of disclosure forms, for comments to include any appendixes for supporting analyses and assessments of the adequacy and acceptability of the methods, models, and analyses used. All comments in the report will be finalized by the panel prior to their release to USACE for each review plan milestone.

f. The IEPR leader shall prepare a Review Report that shall:

(1) Disclose the names of the reviewers and their organizational affiliations and include a short paragraph on both the credentials and relevant experiences of each reviewer.

(2) Include the charge to the reviewers.

(3) Describe the nature of their review and their findings and conclusions.

(4) Include a verbatim copy of each reviewer's comments (either with or without specific attributions) or represent the views of the group as a whole, including any disparate and dissenting views.

Written responses to the IEPR Review Report will be prepared to explain the agreement or disagreement with the views expressed in the report, the actions undertaken, or to be undertaken, in response to the report, and the reasons those actions are believed to satisfy the key concerns stated in the report (if applicable). The revised submittal will be provided to the RMO with the USACE response and all other materials related to the review.

The District's responses shall be submitted to the CEMVD MSC for final MSC Commander approval. After the MSC Commander's approval, the District will make the report and responses available to the public on the District's website.

g. Required Type II IEPR Panel Expertise. The IEPR panel will consist of three reviewers selected by the Louisiana Water Resources Council. The District will not nominate IEPR candidates. There will not be public nominations of IEPR reviewers. Panel members should have an engineering degree (and equivalent from the environmental reviewer), a minimum of 15 years experience in design and construction (or evaluation of projects from NEPA standpoint for the environmental reviewer) of projects similar in scope to the projects under review, and should be registered professionals. The panel members shall be completely independent of the projects being reviewed and fully disclose any known or potential conflict of interest that may arise from the performance of the work. Areas of conflict may include current employment by Federal or state governments, participation in developing the subject project, a publicly documented statement advocating for, or against, the subject project, current or future interests in subject project or future benefits from the project, and paid, or unpaid, participation in litigation against the USACE. Reviewers will be required for the following disciplines:

(1) Engineering. Two team members are needed for engineering. Team members should have experience in hurricane and storm damage reduction systems for coastal areas. One team member should be experienced in geotechnical engineering aspects of HSDRRS projects, and the other team member should be experienced in civil design of features such as levees, pump stations, and water control structures.

(2) Environmental. Team member should have extensive experience in NEPA requirements and be familiar with issues concerning cultural and environmental resources and HTRW.

h. Panel Selection. The contractor managing the IEPR shall first coordinate with the current Primary Louisiana Water Resources Council (LWRC) standing IEPR panel and then the LWRC candidate pool, as identified and described in the Louisiana Water Resources Council Independent External Peer Review Type I and Type II Peer Review Methodology, dated September 30, 2010, to identify candidates to serve as IEPR panel members. Peer reviewers shall have experience in planning, design, and construction of projects similar in scope to the NOV/NFL projects.

i. Documentation of Modified Type II IEPR.

(1) The IEPR will consist of a review of the decision documents and the associated NEPA documents, as well as design documentation and construction for representative project features. DrChecks review software will be used to document IEPR comments and aid in the preparation of the Review Report. The Modified Type II IEPR will commence upon approval of the Review Plan and continue throughout construction. Regardless of the schedule, IEPR will not be allowed to delay project design or construction. Comments should address the adequacy and acceptability of the engineering and environmental methods, models, and analyses used. The IEPR comments should generally include the same four key parts as described for ATR comments in paragraph 4. The OEO will be responsible for compiling and entering comments into DrChecks.

(2) The final Review Report (Part II) will be submitted by the IEPR panel following construction of the representative features for which design reviews are conducted. Intermediate review documentation related to the PDD and PIR/APIR, as well as the associated NEPA documentation (Part I), will be provided to USACE as soon as it is available for incorporation into updated project documents.

7. MODEL CERTIFICATION AND APPROVAL

a. General. The use of certified or approved models for all planning activities is required by EC 1105-2-407. This policy is applicable to all planning models currently in use, models under development, and new models. The appropriate PCX will be responsible for model certification/approval. The goal of certification/approval is to establish that planning projects are theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. The use of a certified or approved model does not constitute technical review of the planning product. Independent review of the selection and application of the model and the input data and results is still required through conduct of DQC, ATR, and if appropriate, IEPR. Independent review is applicable to all models, not just planning models. Models used in the development of the decision document are described below:

b. Environmental Models for Habitat Evaluation or Mitigation Planning.

(1) Wetland Value Assessment (WVA). The WVA model is used in Louisiana's coastal zone and was the method used to evaluate wetland impacts for this project. The WVA is currently undergoing the review process to become an approved planning model.

(2) Micro Computer Aided Cost Estimating System (MCACES). The MCACES Mil 3.0 is being used to prepare the cost estimate for the project. The MII provides an integrated cost estimating system (software and databases) that meets USACE requirements for preparing cost estimates.

(3) Advanced Circulation Model (ADCIRC). The ADCIRC model was used for the surge modeling. The ADCIRC was developed by the ADCIRC Development Group which includes representatives from the University of North Carolina, Oklahoma, Notre Dame, and Texas. The New Orleans District is a development partner with the ADCIRC Development Group. The ADCIRC Model is a state-of-the-art model that solves the generalized wave-continuity equation on linear triangular elements. For the coastal Louisiana modeling, the finite element grid contains approximately 2.1 million horizontal nodes and 4.2 million elements.

(4) Steady State Spectral Wave Model (STWAVE). The STWAVE is a nearshore wave model developed by CHL. For the JPM-OS effort, STWAVE was used to generate the nearshore wave heights and wave periods using boundary conditions from the WAM modeling. The WAM-to-STWAVE procedure was applied for each storm. For the analyses completed to date, the STWAVE model did not include frictional effects because of scientific uncertainty which implies erring on the conservative side. For more information about the background of this choice, the reader is referred to USACE (2007).

8. REVIEW SCHEDULES AND COSTS

ATR Schedule and Cost. The ATR of Cost Estimates for decision documents (PDD and PIR/APIR) was completed in August 2011. The ATR for the Non-Federal project's EIS and the NOV SEIS was performed in January and February 2011 and cost approximately \$24,000 each. The ATR for design documentation is ongoing and will not be complete until the design of the last item of work is approved. The schedule for these activities is shown in Attachment 2.

a. Modified Type II IEPR Schedule and Cost. The IEPR will begin following approval of the Review Plan and continue throughout construction of the representative features for which design documentation will undergo IEPR. Regardless of the schedule, IEPR will not be allowed to delay project design or construction. The cost has not been determined.

b. Model Certification/Approval Schedule and Cost. The WVA Model Certification process is currently underway; however, we do not have a schedule for completion of this process. The MCACES is not really a model, but is the required software for Cost Engineering throughout USACE; therefore, it does not require certification. The ADCIRC and STWAVE

models are described in the HSDRRS Design Elevation Report (August 2010) and were certified for use in developing design information for the Greater New Orleans HSDRRS, including the NFL and NOV projects. The report was subjected to IEPR for the HSDRRS in late 2010/early 2011.

9. PUBLIC PARTICIPATION

Private individuals, elected officials, agencies, and all levels of government have been publically involved in the development of the project. The primary vehicle for public involvement is the process of complying with NEPA and its provision for public involvement. A 45-day comment period and public meetings (April 2011) were held following development of the draft EIS and SEIS, and a 30-day comment period was scheduled after the release of the final document. Comment periods and public meetings were also held before alignment decisions were finalized and input from Parish citizens and officials was considered in the decision process.

10. REVIEW PLAN APPROVAL AND UPDATES

a. The CEMVD Commander is responsible for approving this Review Plan. The Commander's approval reflects vertical team input (involving District, MSC, RMO, and HQUSACE members) as to the appropriate scope and level of review for the decision document. Like the PMP, the Review Plan is a living document and may change as the project progresses. The assigned District is responsible for keeping the Review Plan up to date. Minor changes to the Review Plan since the last MSC Commander approval will be documented as shown in Attachment 3. Significant changes to the Review Plan (such as changes to the scope and/or level of review) should be reapproved by the MSC Commander following the process used for initially approving the plan. The latest version of the Review Plan, along with the Commander's approval memorandum, should be posted on the Home District's webpage. The latest Review Plan should also be provided to the RMO and home MSC.

b. A list of acronyms and abbreviations is attached (Attachment 4).

11. REVIEW PLAN POINTS OF CONTACT

Public questions and/or comments on this Review Plan can be directed to the following points of contact:

CEMVN Point of Contact: Project Manager, CEMVN-PM-OF (504-862-1597)

CEMVK Point of Contact: Project Manager, CEMVK-PP-D (601-631-5745)

MSC Point of Contact: CEMVD-PD-N (601-634-5836)

ATTACHMENT 1
STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the Environmental Impact Statement (EIS)/Supplemental Environmental Statement (SEIS) for the New Orleans to Venice (NOV) Hurricane and Storm Damage Reduction System in Plaquemines Parish, Louisiana. The ATR was conducted as defined in the project's Review Plan to comply with the requirements of Engineer Circular 1165-2-209. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses; alternatives evaluated; the appropriateness of data used and level obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing U.S. Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved, and the comments have been closed in DrChecks.

Name
ATR Team Leader
Office Symbol/Company

Date

Name
Project Manager
Office Symbol

Date

Attachment 1

ATTACHMENT 1 (Cont)
STATEMENT OF TECHNICAL REVIEW FOR DECISION DOCUMENTS

Name
Architect-Engineer Project Manager ¹
Company/Location

Date

Name
Review Management Office Representative
Office Symbol

Date

¹ Only needed if some portion of the ATR was contracted

CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows. Describe the major technical concerns and their resolution.

As noted above, all concerns resulting from the ATR of the project have been fully resolved.

Nathan Snorteland
Director of Risk Management Center
CEIWR-RMC

Date

New Orleans to Venice Reviews
Schedule
12-Sep-11

Project Code	Project Name	Design By	Technical Lead	DESIGN										CONSTRUCTION			2% ROM Cost
				65% EAR	95% Soils Rpt	35% P&S	35% Base	65% P&S	95% P&S	95% Base	100% P&S	RTA	Award	Complete			
NOV-01	East Bank Back Levee Reach C (Phoenix to Bohemia)	A-E BovArcaids		N/A	4/18/2011 A	6/28/2011 A	18-Mar-11	N/A	N/A	N/A	N/A	N/A	6/19/2012*	8/28/2012*	2/21/2014*	\$237.00	
NOV-02	East Bank Back Levee 2 Pump Structure Frontage Rpr. Rich C (Belvue & East Point a la Heche Pmp Sta)	MVR		N/A	4/4/2011 A	7/1/2011 A	22-Apr-11	30-Oct-11	30-Oct-11	30-Jan-12	5-Oct-11		30-Jul-12	26-Sep-12	22-May-14	\$24.70	
NOV-05	West Bank Back Levee Reach A (St. Jude to City Price)	MVS		Completed	3/31/2011 A	7/8/2011 A	25-Apr-11	21-Oct-11	19-Dec-11	19-Dec-11	6-Oct-11	6-Feb-12	14-Jan-14	17-Mar-14	26-Oct-15	\$34.00	
NOV-06	3.3 miles of levee & fronting protection at Diamond PS	MVS		3/18/2011 A	9/19/2011 A	14-Nov-11	20-Jun-11	12-Jan-12	23-Mar-12	23-Mar-12	2-Dec-11	1-Jun-12	1-Apr-15	29-May-15	24-Jan-17	\$80.10	
NOV-07	West Bank Back Levee Reach A (City Price to Empire)	MVP		N/A	3/2/2011 A	9/26/2011 A	3-Mar-11	21-Oct-11	19-Dec-11	19-Dec-11	7-Jul-11	12-Feb-12	17-Nov-14	16-Jan-15	8-Sep-16	\$34.90	
NOV-08	12.1 miles levee enlargement, fronting protection at 2 PS	MVN		N/A	3/31/2011 A	10-Oct-11	21-Mar-11	15-Dec-11	12-Feb-12	12-Feb-12	30-Aug-11		18-Oct-13	18-Dec-13	12-Aug-15	\$26.30	
NOV-09	West Bank Back Levee Reach B2 (Fl Jackson to Venice)	MVM		N/A	4/18/2011 A	8-Oct-11	2-May-11	N/A	N/A	N/A	N/A		10/16/2012*	12/14/2012*	8/8/2014*	\$111.70	
NOV-10	2.4 miles of levee enlargement	MVM		N/A	15-Oct-11	7-Dec-11	1-Apr-11	N/A	N/A	N/A	N/A		9/17/12*	11/15/12*	7/11/2014*	\$98.50	
NOV-11	West Bank MRL Levee (City Price to Port Sulphur)	MVM		N/A	7/1/2011 A	16-Oct-11	10-Mar-11	N/A	N/A	N/A	N/A		8/7/2012*	10/4/2012*	6/2/2014*	\$128.80	
NOV-12	West Bank MRL Levee (Port Sulphur to Fl Jackson)	MVM		N/A	15-Oct-11	30-Oct-11	10-Mar-11	N/A	N/A	N/A	N/A		8/23/12*	10/23/12*	6/18/2014*	\$114.70	
NOV-13	8.2 miles of levee enlargement	MVK		Completed	15-Nov-11	5-Mar-12	10-Jan-12	19-Jun-12	28-Aug-12	28-Aug-12	6-Jul-12		22-Apr-13	19-Jun-13	13-Feb-15	\$73.60	
NOV-14	Empire Floodgate	MVN		Completed	15-Dec-11	22-Mar-12	30-Jan-12	16-Jul-12	1-Oct-12	1-Oct-12	8-Aug-12		4-Jun-13	1-Aug-13	30-Mar-15	\$58.10	
NOV-15	Empire Lock	MVR		completed	4/6/2011 A	7/1/2011 A	10-Mar-11	N/A	N/A	N/A	N/A		8/1/2012*	9/28/2012*	3/25/2014*	\$174.50	
NOV-16	West Bank MRL Replacing I-walls at Chikress & Venice	MVR		completed	4/8/2011 A	5/27/2011 A	13-Jan-11	4-Oct-11	4-Oct-11	14-Dec-11	12-Jul-11		1-Jun-12	31-Jul-12	27-Mar-14	\$40.90	
NOV-NF-W-04	West Bank MRL Levee Enlargement Buras Area, Sta 650-1003	A-E ECM-GEC		completed	6/30/2011 A	30-Sep-11	2-Mar-11	9-Nov-11	6-Jan-12	6-Jan-12	15-Jul-12	13-Feb-12	11-Jul-13	11-Sep-13	27-Mar-16	\$127.10	
NOV-NF-W-05	Galvillage to LaRausette	A-E NOSBE		completed	5/16/2011 A	10-Oct-11	8-Mar-11	11-Dec-11	11-Dec-11	11-Feb-12	14-Jul-11	1-Apr-12	30-Aug-13	1-Nov-13	7-Mar-16	\$416.00	
NOV-NF-W-06	LaRausette to Myrtle Grove	MVK		completed	1-Nov-11	15-Dec-11	20-Jul-11	15-Feb-12	15-Apr-12	15-Apr-12	6-Dec-11		25-Nov-13	29-Jan-14	21-Jul-16	\$555.50	
NOV-NF-W-06	Myrtle Grove to St. Jude	MVN		completed	1-Nov-11	9/1/2011 A											

** Cd-Construction; CS-Civil/Site; Co-Cost; El-Electrical; Ge-Geotechnical; Hy-Hydraulic; Me-Mechanical; Re-Reallocations; Sp-Specifications; St-Structural; Su-Surveys

General Notes: Bolded entries were revised since the last report.

Items are highlighted as follows: Pink = Needs Attention, Yellow = last month, Blue = current month, Green = next month, and Grey = 2 months from current month.

L - Levee F - Fronting Protection A - Actual

MVK Sr PM Paul Eagles

MVN Sr PM Julie LeBlanc

MVK Technical Lead Ben Caldwell

ATR Leader J B Smith NAP

Attachment 2

ATTACHMENT 4
ACRONYMS AND ABBREVIATIONS

Term	Definition	Term	Definition
AFB	Alternative Formulation Briefing	NED	National Economic Development
ASA(CW)	Assistant Secretary of the Army for Civil Works	NER	National Ecosystem Restoration
ATR	Agency Technical Review	NEPA	National Environmental Policy Act
CSDR	Coastal Storm Damage Reduction	O&M	Operation and maintenance
DPR	Detailed Project Report	OMB	Office and Management and Budget
DQAP	Design Quality Assurance Plan	OMRR&R	Operation, Maintenance, Repair, Replacement, and Rehabilitation
DQCP	Design Quality Control Plan	OEO	Outside Eligible Organization
DST	District Support Team	OSE	Other Social Effects
DX	Directory of Expertise	PCX	Planning Center of Expertise
EA	Environmental Assessment	PDT	Project Delivery Team
EC	Engineer Circular	PAC	Post Authorization Change
EIS	Environmental Impact Statement	PMP	Project Management Plan
EO	Executive Order	PL	Public Law
ER	Ecosystem Restoration	QMP	Quality Management Plan
FDR	Flood Damage Reduction	QA	Quality Assurance
FEMA	Federal Emergency Management Agency	QC	Quality Control
FRM	Flood Risk Management	RED	Regional Economic Development
FSM	Feasibility Scoping Meeting	RIT	Review Integration Team
GRR	General Reevaluation Report	RMC	Risk Management Center
HQUSACE	Headquarters, U.S. Army Corps of Engineers	RMO	Review Management Organization
IEPR	Independent External Peer Review	RTS	Regional Technical Specialist
ITR	Independent Technical Review	SAR	Safety Assurance Review
LRR	Limited Reevaluation Report	USACE	U.S. Army Corps of Engineers
MSC	Major Subordinate Command	WRDA	Water Resources Development Act
NAD	North Atlantic Division		



DEPARTMENT OF THE ARMY
RISK MANAGEMENT CENTER, CORPS OF ENGINEERS
13952 DENVER WEST PARKWAY SUITE 200
GOLDEN, CO 80401

REPLY TO
ATTENTION OF

CEIWR-RMC

26 September 2011

MEMORANDUM FOR: Commander, Mississippi Valley Division, ATTN: CEMVD-CE

SUBJECT: Risk Management Center Endorsement – New Orleans to Venice Hurricane and Storm Damage Risk Reduction System Review Plan

1. The Risk Management Center (RMC) has reviewed the Review Plan (RP) for the New Orleans to Venice Hurricane and Storm Damage Risk Reduction System, dated September 2011, and concurs that this RP complies with the current peer review policy requirements outlined in EC 1165-2-209 “Civil Works Review Policy”, dated 31 January, 2010.

2. This review plan was prepared by the New Orleans District, reviewed by Mississippi Valley Division and the RMC, coordinated with the insert Flood Risk Management Planning Center of Expertise and Coastal Storm Damage Reduction Planning Center of Expertise, and all review comments have been satisfactorily resolved.

The RMC concurs that a Type I IEPR is not required for this project. The RMC will be the RMO for the Type II IEPR.

3. The RMC clears this document to be approved by the MSC Commander. Upon approval of the RP, please provide a copy of the approved RP, a copy of the MSC Commander’s approval memorandum, and a link to where the RP is posted on the District website to Colin Krumdieck, RMC Senior Review Manager (colin.w.krumdieck@usace.army.mil).

4. Thank you for the opportunity to assist in the preparation of this RP. Please coordinate all aspects of the Agency Technical Review, the Independent External Peer Review (as appropriate), and Model Certification efforts defined in the RP. For further information, please contact Mr. Colin Krumdieck at 720-215-5545.

Sincerely,

SNORTELAND.NATHAN.J.1387298009

Digitally signed by
SNORTELAND.NATHAN.J.1387298009
DN: c=US, o=U.S. Government, ou=DoD,
ou=PKI, ou=USA,
cn=SNORTELAND.NATHAN.J.1387298009
Date: 2011.10.06 08:36:19 -06'00'

NATHAN J. SNORTELAND, P.E.
Director
Risk Management Center

CF:
CEIWR-RMC-ZA (Mr. Snorteland)
CEMVD-CE (Division Quality Manager)

Encl 2