

**Comprehensive Everglades Restoration Project (CERP)  
Independent Technical Review  
Procedures and Policies**

**A. Background.** An Independent Technical Review (ITR) is required for all U.S. Army Corps of Engineers projects including CERP. This is a Washington level Corps wide policy that is further defined by Engineer Regulation, Planning Guidance Notebook – ER 1105-2-100, dated 22 Apr 2000 (see pages G-22 to G-26 [ER 1105-2-100 \(22 April 2000\)](#)). ITR is part of the corporate Quality Control/Quality Assurance (QC/QA) process. Quality Control is comprised of peer reviews, normal technical reviews and the Independent Technical Review. Quality Assurance and oversight is for areas of responsibility (and governance) outside of the authority assigned to the Project Delivery Team (PDT).

All planning, engineering and design products shall have an ITR. A separate ITR Team will be established when work is started on a product. The ITR team shall conduct such reviews as are necessary to insure that the product is consistent with established criteria, guidance, regulations, procedures, and policy. The ITR process shall be a continuous process with reviews coordinated with the Project Delivery Team (PDT) to minimize lost planning and design effort.

A copy of the ITR documentation along with a Statement of Independent Technical and Legal Review must be submitted with all documents forwarded for review and approval by the SFWMD Corporate Review Group and/or Governing Board, Florida Department of Environmental Protection, or the Headquarters office of the US Army Corps of Engineers (HQUSACE). A sample Statement of Technical and Legal Review is to be included as Tab B, Appendix J of the PMP.

**(1) Responsibility.** The lead agency is responsible for QC role of establishing ITR. By regulation, COE retains a QA role in all products for the purpose of assuring resolution of Federal legal, technical and policy review issues. In a like manner, SFWMD retains a QA role in all products for the purpose of assuring resolution of state legal, technical and policy review issues.

**(2) ITR Teams.** ITR Teams can be comprised of a mixture of personnel from SFWMD, COE, contractors and other personnel from State and Federal agencies. The ITR team will be an interdisciplinary team with the ability to review the technical aspects (planning, environmental, engineering, design, construction, and real estate aspects) of the product. The Division Chiefs from the Jacksonville District will select USACE team members and the Department Director ECP/CERP will select SFWMD team members.

**(3) PDT.** PDTs can be comprised of mixtures of personnel from SFWMD, COE, contractors and other personnel from State and Federal agencies. Members of the PDT cannot serve as members of the ITR team.

## **B. Work Performed by COE.**

**(1) Work with In-house Personnel.** The COE will conduct and certify ITR based on ITR Team evaluations. QA of the process and findings will be jointly performed by the COE and SFWMD.

**(2) Work by Contract Personnel.** For Plans & Specifications (P&S), the Contractor will conduct and certify ITR based on the Contractor's ITR Team evaluations. QA of the process and certification will be performed jointly by the COE and SFWMD. For decision documents (Feasibility Reports and Project Implementation Reports (PIR)), both the Contractor and COE will jointly conduct and certify ITR based on ITR Team evaluations. QA will be performed by the COE and SFWMD.

## **C. Work performed by SFWMD.**

**(1) Work with In-house Personnel.** For Design Documentation Reports (DDR), Engineering Documentation Reports (EDR) and P&S, SFWMD will conduct and certify ITR Team Evaluations. QA will be performed by the COE and SFWMD. For decision documents (Feasibility Reports and PIR's), both SFWMD and COE will jointly conduct and certify ITR based on ITR Team evaluations. QA will be performed by the COE and SFWMD.

**(2) Work by Contract Personnel.** For DDR, EDR and P&S, the Contractor will conduct and certify ITR based on the Contractor's ITR Team Evaluations. QA will be conducted by the COE and SFWMD. For decision documents (Feasibility Reports and PIRs), the Contractor, SFWMD and COE will jointly conduct and certify ITR based on ITR Team evaluations. QA will be performed by the COE and SFWMD.

**D. Independent Technical Review Joint Conference.** Early in the PMP development, a two part joint conference between the PDT and the ITR team will be scheduled. Part I will address the current project plan, project background, objectives, scope of field investigations, schedule, cost, design options, and major issues. Part II will review the procedures, policies and milestone requirements of the ITR process, establish the coordination process between the PDT and the ITR team to minimize lost planning and design effort, and formulate an ITR strategy document (ITRSD). The ITRSD will show how the review process will be coordinated and include the required and additionally agreed to milestones. The ITRSD will be included in the PMP and all milestones will be included in the WBS.

**E. Dispute Resolution between ITR team and PDT.** Conflicts that cannot be resolved between ITR and PDT are to be elevated to Senior Management (COE/PRB) and (SFWMD/CRG).

## **1. ITR PROCEDURES AND POLICIES FOR CERP PLANNING LEVEL DECISION DOCUMENTS**

**A.** The following guidelines and instructions are provided and are to be implemented immediately. If current agreements and PMPs do not reflect the specifics below, they are to be modified immediately.

**B.** These instructions apply to all planning level products which require South Atlantic Division, HQUSACE, or Congressional approval and include Feasibility Reports, Project Implementation Reports, General Re-evaluation Reports, Limited Re-evaluation Reports, and Post Authorization Change Reports.

(1) It is the PDT technical member's responsibility to see that ITR is done correctly. It is the PM's responsibility to see that ITR gets done but not necessarily to do it.

(2) ITR teams should be formally set up at the same time or very shortly after the PDT is established. ITR is continuous throughout the process of preparation of the product. It is the Product Technical Lead's responsibility to request, set up, and coordinate with the ITR team.

(3) Specific milestones to be shown in the PMP, resourced, and executed are:

(a) FSM (Feasibility Scoping Meeting) is to be arranged as soon as conceptual alternatives for evaluation have been identified, environmental scoping has been done, and problems identified. The PMP should note the involvement of SAD and HQ USACE as the FSM includes SAD and HQUSACE. Any PMP completed without this notation should be modified to include this milestone.

(b) AFB (Alternative Formulation Briefing) is to be held as soon as the tentatively selected plan is identified. Instruction for information submission to SAD and HQ is contained in ER 1105-2-100. While not requiring submission of a draft Report, a substantial amount of information is required. In any event, SAD and HQ approval is required prior to release of a draft report for public and agency review. The AFB involves SAD and HQUSACE attendance.

(c) IRC (Issue Resolution Conference) and IPR (In-Progress Review) meetings can be arranged at anytime necessary to resolve problems or to check on the direction and scope of studies. These, as well as FSM's and AFB's are easy points to check and clear issues and most importantly, get SAD/HQUSACE buy-in prior to draft and final reports. Documentation that ITR has been conducted must be submitted along with other information in advance of all such meetings.

(d) In order to insure that ITR is being done the way it is supposed to be done, there should be at least 2 additional ITR formal meetings with the PDT during the course of preparation of most decision documents (Feasibility, PIR, GRR, PAC reports). These are in addition to the ones required before a FSM and AFB.

(e) PMP's will include in the section or appendix on the QA/QC Plan, a listing of ITR key review points including the FSM and AFB. Resource plans should likewise include funding for these activities.

C. Should the PDT or ITR teams propose a variance in the product or project cost from that contained in the authorization document of the latest approved document covering that product, then the PDT will notify, describe and explain the variance to the PRB/CRG. This applies to cost of preparing project management plans (PMP's), conducting Pre-construction Engineering, and Design (PED), and Construction (including Real Estate). At anytime that the team envisions not following published guidance, such as ER's, ETL's, PGM's, the team will report their desire to the PRB with rationale for same.

## **2. ITR PROCEDURES AND POLICIES FOR ENGINEERING LEVEL DESIGN DOCUMENTS**

**A.** The following guidelines and instructions are provided and are to be implemented immediately. If current agreements and PMPs do not reflect the specifics below, they are to be modified immediately. These rules and procedures are to be followed regardless of what district or sponsor element has the lead.

**B.** These instructions apply to all Engineering and Design products of the CERP program and cover ITR for technical products as further defined in ER 1110-2-1150. These procedures and policies address Design Documentation Reports (DDR), Engineering Documentation Reports (EDRs), Plan and Specifications (P&S), and Water Control Manuals.

(1) It is the Project Manager's responsibility to insure that ITR is scheduled, budgeted, and accomplished. The PM is not on the ITR team.

(2) ITR teams shall be formally set up at the same time or very shortly after the PDT is established. ITR is continuous throughout the process of preparation of the product. During preparation of the engineering document, it is the Project Engineer's responsibility to initiate and coordinate with the ITR team.

(3) The following milestones shall be added to District schedules, QCPs and PMPs. Many critical decision points are reached within the design process that should receive the concurrence of the ITR Team at the time they are made rather than waiting until completion of the design. In addition to scheduled milestones, the PDT may request concurrence meetings. The results of the concurrence meetings shall be documented per the QCP.

(a) 30 Percent Technical Review Conference. The purpose of the initial 30 Percent TRC is to discuss the current project plan, project background, objectives, schedules, costs, design options, major issues, problem areas, and the type of documents which must be prepared and the level of detail in those documents. The objective of the initial TRC will be oriented toward the design of the current project plan. The ITR Team and RPE will be assigned and the initial ITR strategy will be developed and coordinated with the PDT. The scope and schedule for the Value Engineering (VE) activities will also be developed and coordinated with the PDT. The completion activities and responsibilities shall be documented in the QCP and PMP. For DDRs, an evaluation of need to change the scope to EDR will be documented in the PMP.

(b) 60 Percent Technical Review Conference. The purpose of the 60 percent TRC is to evaluate technical progress of the activities and responsibilities documented in the QCP and PMP and to perform the ITR reviews and Value Engineering. The QCP and PMP will be updated to include the remaining completion activities and responsibilities.

(c) Final ITR and Certification. The final product/document will be reviewed and after receipt of comments, the need for a TRC will be assessed. Upon resolution of all comments and issues, the document will be a ITR Certified. For P&S, the Final ITR and Certification will occur after resolution of BCO&E comments.

C. PMPs shall include in the section of appendix on the QA/QC Plan, a listing of ITR key review points including 30 percent TRC, 60 percent TRC and Final ITR and Certification. The PMP will specifically include DDRs, EDRs, and P&S as products.

D. For engineering products, including those documents that are prepared by contract or by sponsors, the above milestones shall be scheduled and held the same as a COE prepared document. A/E contractors or sponsors shall also perform ITR and appropriate documentation (which includes comments and responses) shall be maintained and provided in accordance with the above milestones. Knowledgeable and experienced personnel must perform policy, procedural and technical compliance ITR. If experienced personnel are not available to the A/E contractor or sponsor, then COE personnel must supplement the ITR team.

### **3. ITR PROCEDURES AND POLICIES FOR OTHER DOCUMENTS**

A. The following guidelines and instructions are provided and are to be implemented immediately. If current agreements and PMPs do not reflect the specifics below, they are to be modified immediately.

B. These instructions apply to all other products and documents produced as a part of project implementation. This includes all real estate documents, contract documents, O&M manuals, and other such documents.

- (1) It is the Project Manager's responsibility to insure that ITR is scheduled, budgeted, and accomplished. The PM is not on the ITR team.
- (2) An ITR Team will be established for other technical documents such as those mentioned in B. above.
- (3) The Project Manager will ensure that appropriate milestones are established and monitored to ensure ITR is accomplished according to the overall project schedule.