

FERC Dam Safety Performance Monitoring Program

An Independent Consultant's Perspective

Presented By:

Jeffrey H. Coffin, P.E.

Senior Civil Engineer

Kleinschmidt Associates



www.KleinschmidtUSA.com

Presented To:

"Dam Safety Performance
Monitoring Program & PFMA
Including Facilitator"
Training Workshop

Denver, CO

October 20, 2004

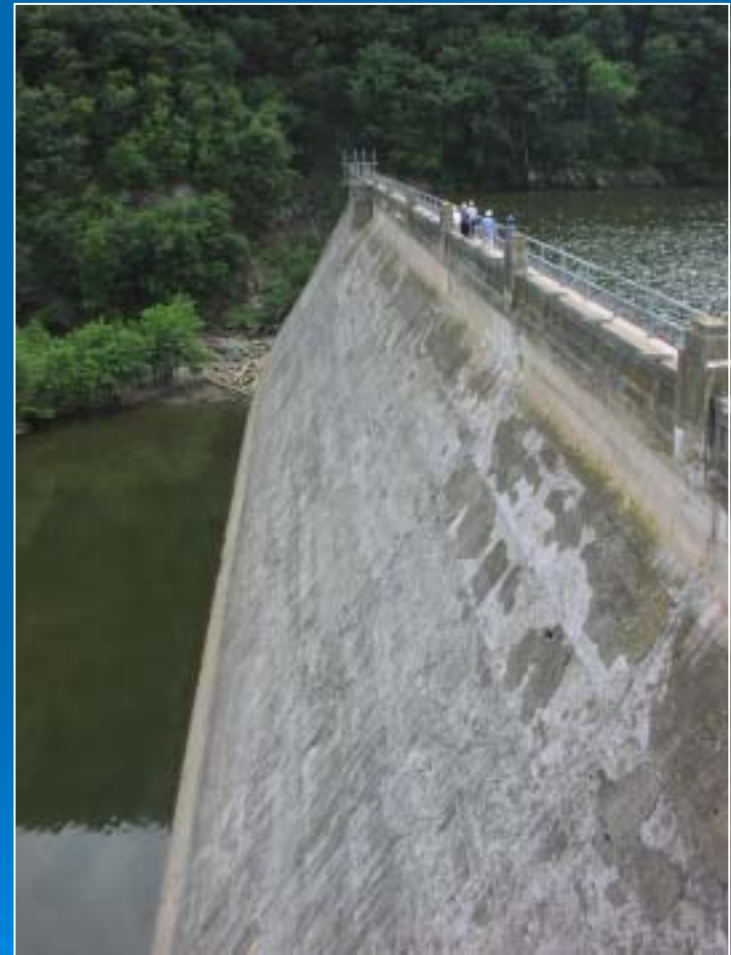
Part 12D Process – Overview

- Part 12D Inspection & Report
- Supporting Technical Information Document (STID)
- Potential Failure Mode Analysis (PFMA)



Initial Steps (Owner & Consultant)

- Select Independent Consultant
- Identify PFMA Team & Core Team
- Start Data-Assembly & Prepare STID (Draft)



Select Independent Consultant

- Owner selects candidate (10+ years experience)
- Submit resume to FERC
- FERC approves



Identify PFMA Team

PFMA TEAM:

- Core Team
- Project Staff (O&M)

CORE TEAM:

- Facilitator (Owner selects)
- Owner Representative(s)
- Independent Consultant
- FERC Engineer(s)
- Outside Consultant(s)
- Notetaker



Prepare STID (Draft)

- Assemble Pertinent Materials
- Draft Report
- Can be done in-house (Owner) or by Consultant



PFMA Preparations

➤ Logistics

- Rooms for reading & meeting
- Facilities: dining, restrooms
- Climate control/comfort



PFMA Preparations (cont.)

- Reference Materials
 - Organized
 - Provide listing
- Project Drawings
 - Post on wall
- Flipcharts
 - Several!
 - Colored markers



Conduct PFMA

- Day 1 (a.m.) = Site Visit (Core Team)
- Day 1 (p.m.) = Detailed Review of Project Information (Core Team)
- Day 2 = PFMA Session (PFMA Team)



Conduct Part 12D Field Inspection

- Day 3+
- Done by Independent Consultant & Owner Representative
- Focus on PFMs identified in PFMA
- FERC Operation Inspection done concurrently but separately



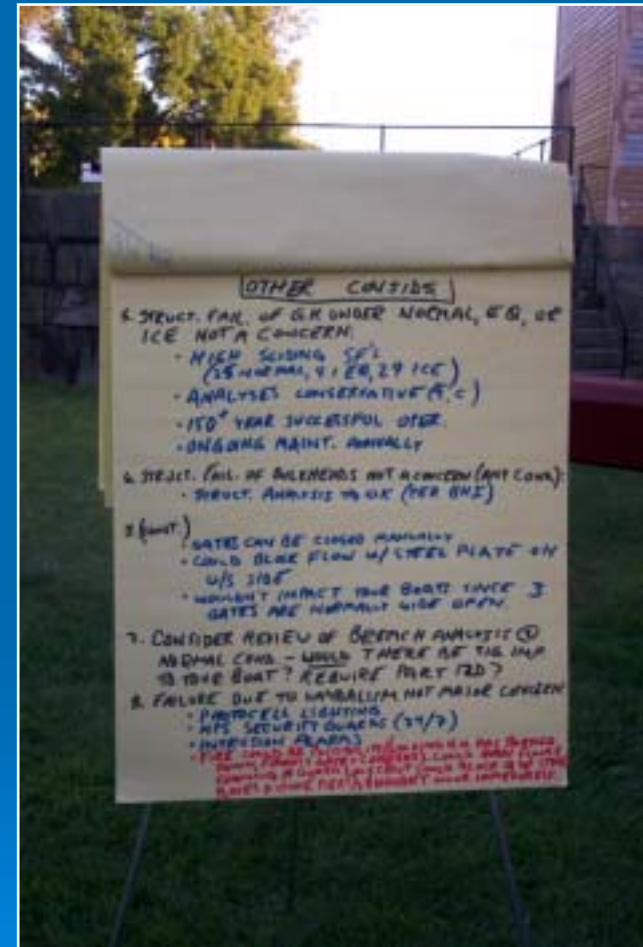
PFMA Report Prep.

- Purpose: Document PFMA Session & Discussions
- Major Findings & Understandings (MFU) (7 days)
- Draft PFMA report (30 days)
- Prepared by I.C., Reviewed by Facilitator then by PFMA Team



STID & Part 12D Report

- Prepare Draft Part 12D Report – Owner Review
- Finalize STID (Input from PFMA Session)
- (Final STID includes Final PFMA Report)
- Finalize Part 12D Report



FERC Submittal

- Part 12D Report & STID submitted concurrently
 - Can be separate volumes
 - STID also on CD



LESSONS LEARNED

- Advance preparation important (**Start Early**)
- Have all documents on hand
- Relatively large up-front cost but one-time expense
- Benchmark – opportunity to review O&M and cap. ex. needs



Contact Info.

Jeffrey H. Coffin, P.E.
Senior Civil Engineer
Kleinschmidt Associates
75 Main Street
Pittsfield, Maine 04967

(207) 487-3328 x-277

Jeff.Coffin@KleinschmidtUSA.com

