



Hydroelectric Design Center



US Army Corps
of Engineers

**"Cost Trends for
Hydropower Capital
Replacements"**



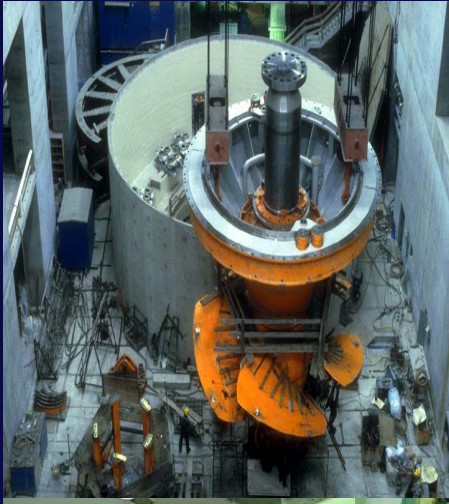


US Army Corps
of Engineers

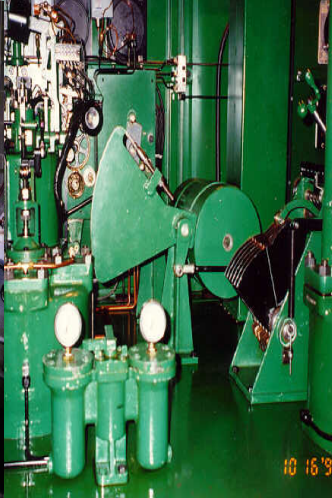
Presentation Outline

- A little about HDC
- Cost Escalation of materials
- Issues impacting interest & bids
- Discussion



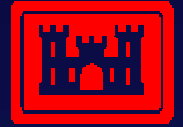


HDC Expertise



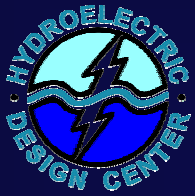


Mission

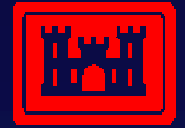


US Army Corps
of Engineers

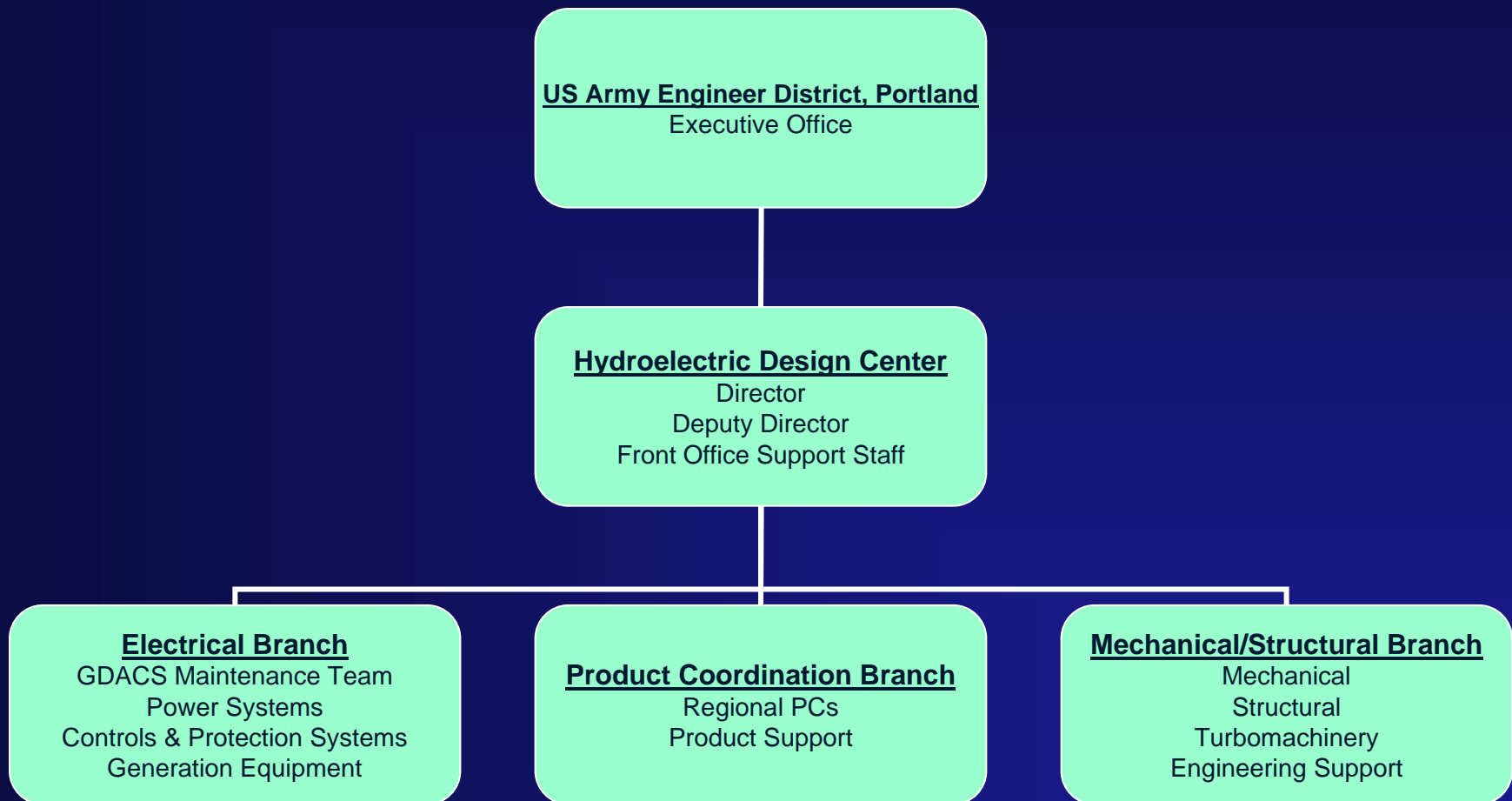
- **The Hydroelectric Design Center performs engineering and design, maintains expertise, and develops standards for the US Army Corps of Engineers hydroelectric power facilities and large pumping plants**

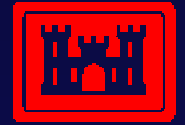


HDC Organization



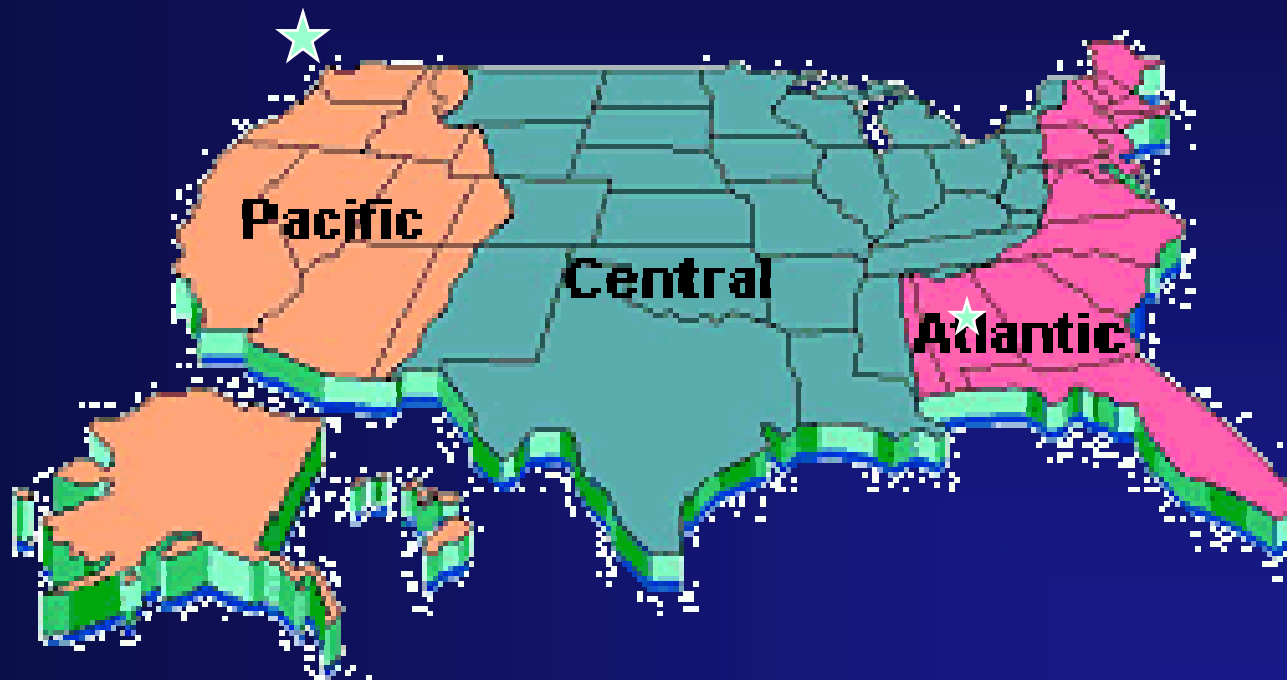
US Army Corps
of Engineers



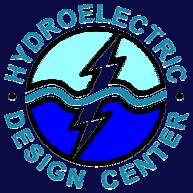


US Army Corps
of Engineers

Regional Product Coordination



**28 Mechanical Engineers + 30 Electrical Engineers + 3 Computer Engineers +
6 Civil/Structural Engineers + 9 Technicians + 1 Chemist + 13 Others = 88**
Includes 3 in Mobile, Alabama

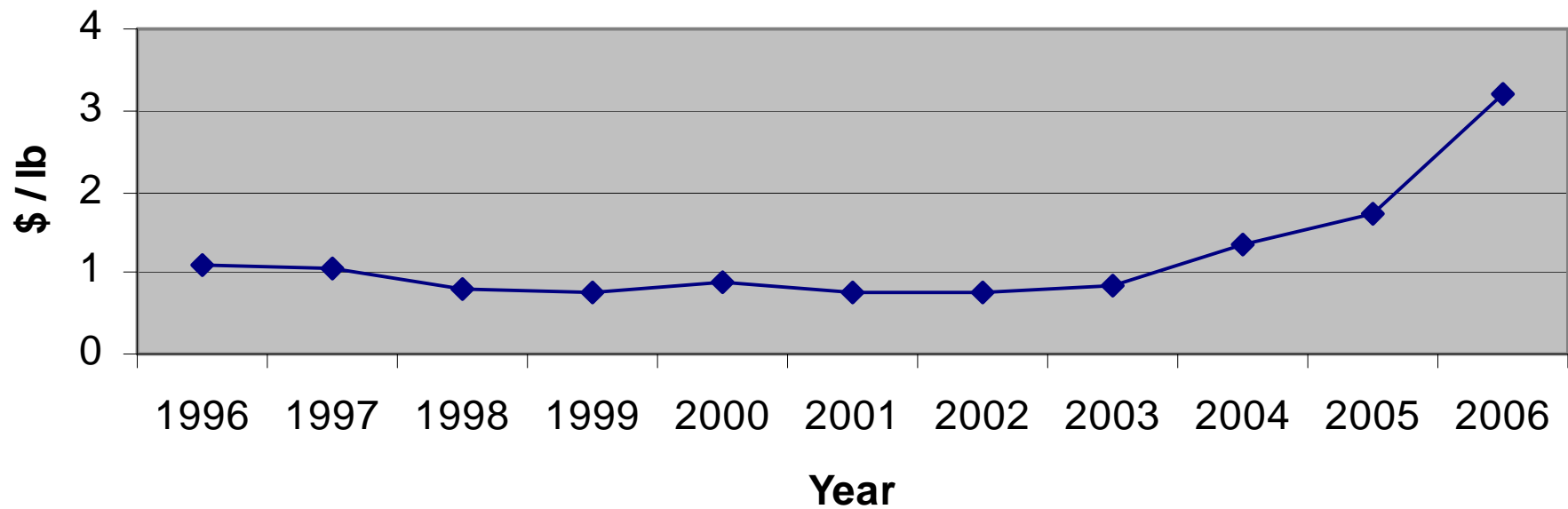


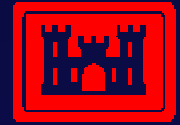
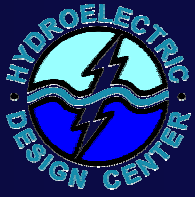
Price of Copper



US Army Corps
of Engineers

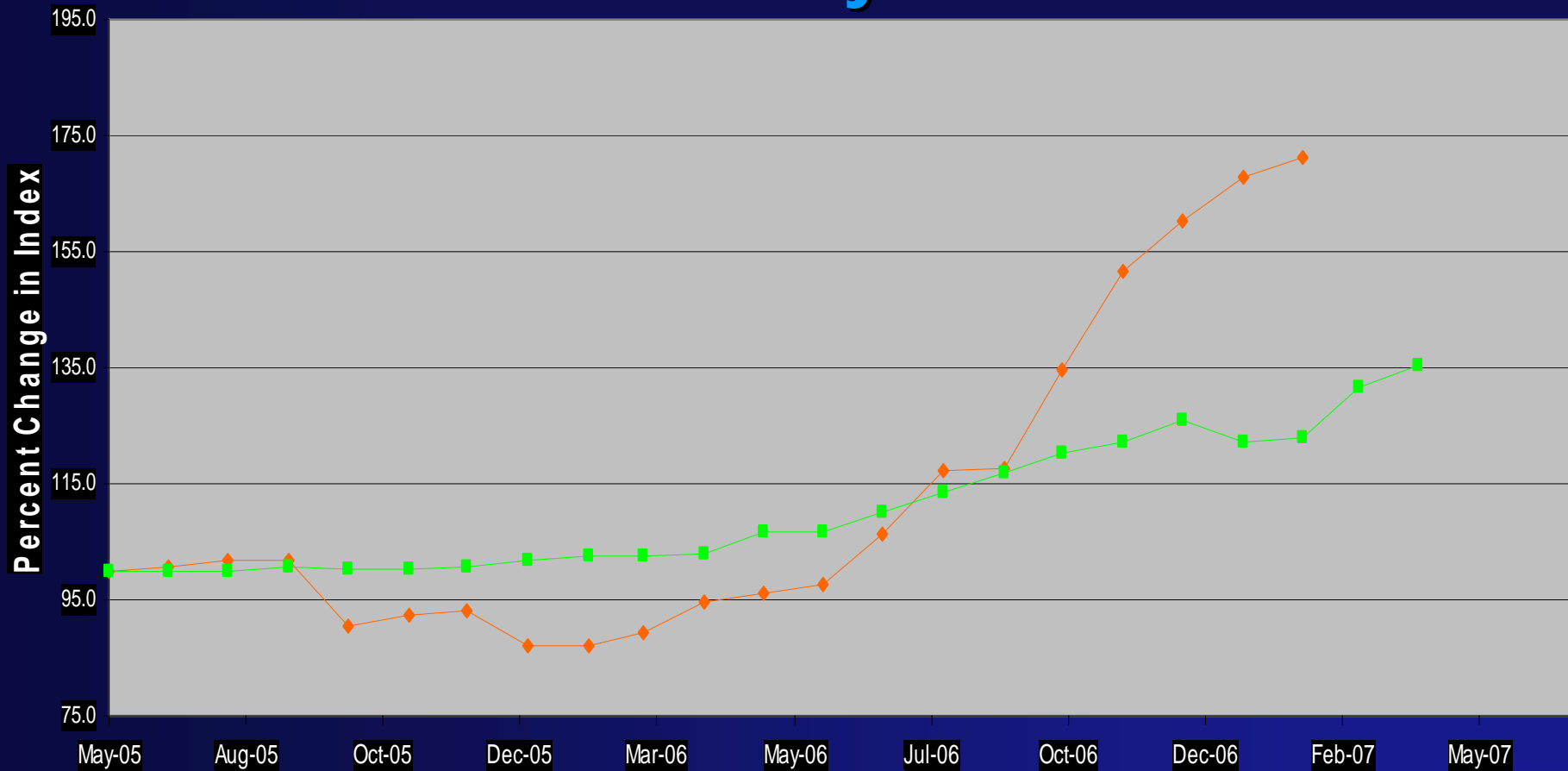
Price of Copper





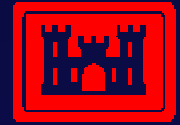
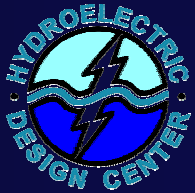
US Army Corps
of Engineers

Stainless Steel & Alloy Price Indicators



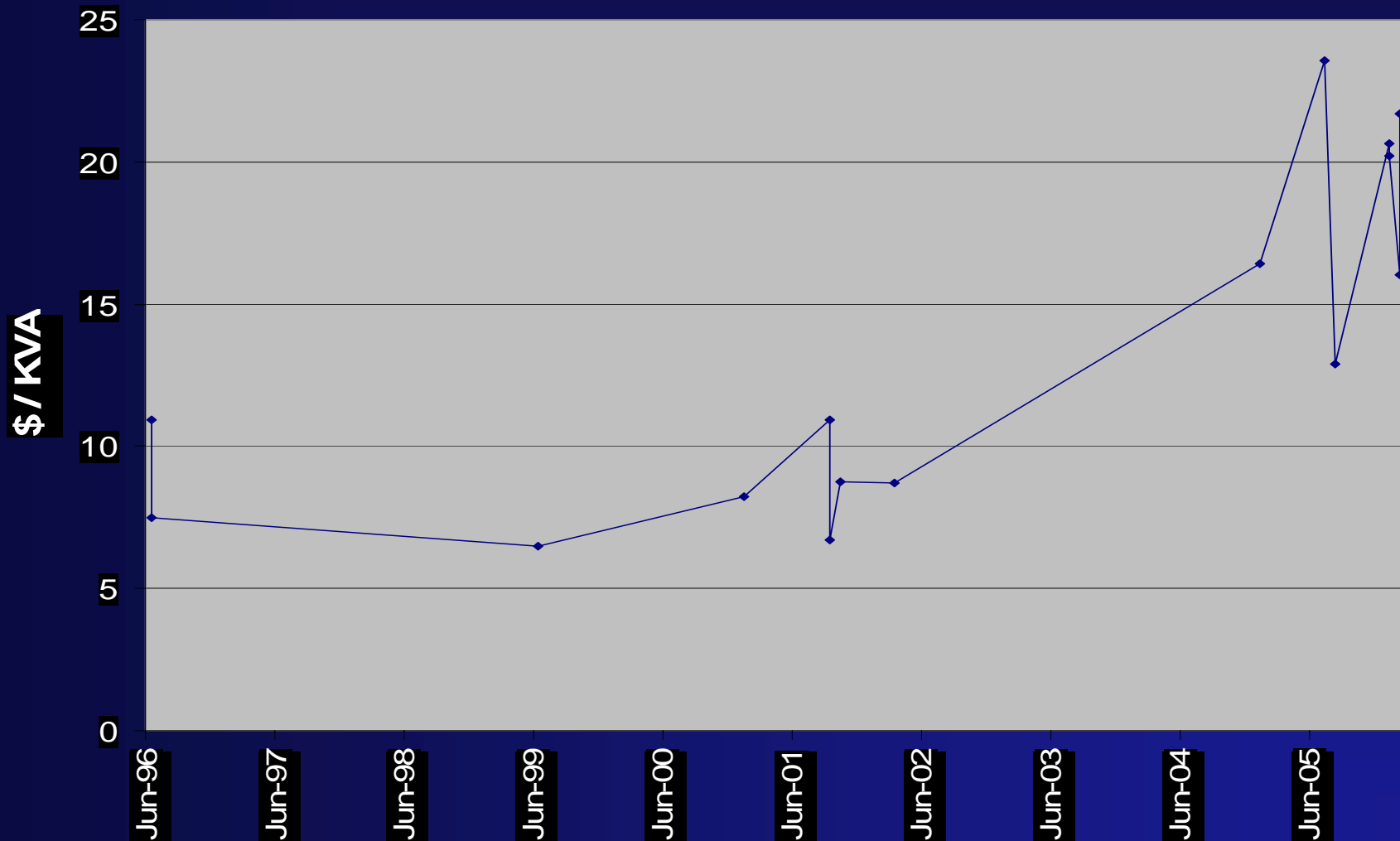
—◆— MEPS NASS 304

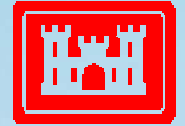
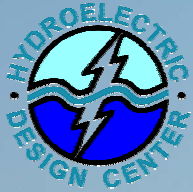
—■— US BLS 101508



US Army Corps
of Engineers

Transformer Costs

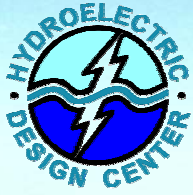




US Army Corps
of Engineers

McNary GSU Transformers

- Contract established 2004. Base of 4 transformers, options for 18.
- Contract cost \$600,000 per transformer.
- Exercise option, contractor is asking \$826,000 for the next 9 transformers.
- Government & contractor negotiating price.

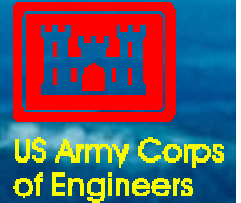
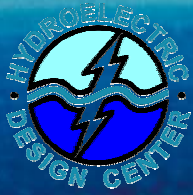


Asbestos Abatement



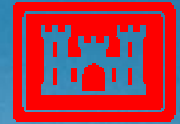
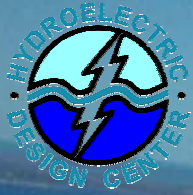
US Army Corps
of Engineers

- Industry resistance to bidding jobs that require handling asbestos
- Three leading hydropower contractors have specifically identified this issue.
- Trial; De Gray Unit 2 Rewind, Government employees will remove the stator winding.



Accounting Liability

- **Federal Acquisition; Negotiated or commercial acquisition.**
- **Negotiated has more risk for the contractor.**
- **18 months ago one contractor informed us they will no longer bid on negotiated construction jobs.**
- **Feedback from contractor on a powerhouse major rehab, "We are much less motivated to bid on negotiated construction jobs".**



US Army Corps
of Engineers

Bonding

- **Difficult post September 11, 2001.**
- **Standard federal contract is for 100% and duration of contract.**
- **Very difficult for contractors to get bonds extending over 5 years.**
- **Bond only the unit being worked (Ozark).**



US Army Corps
of Engineers

Questions & Discussion

