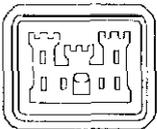


CLIMATE CHANGE FUEL CELL PROGRAM

Dr. M.J. Binder
USACERL

W.C. SMITH
DOE/FETC

DOE/EPRI/GRI Conference
3 August 1999



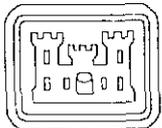
US Army Corps
of Engineers

Engineer Research & Development Center

FY1993 / FY1994

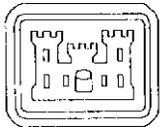
Appropriations

- Provided procurement funds for purchase and installation of fuel cells on DoD facilities
- 30 ONSI PC25 200 kW PAFC's purchased and installed



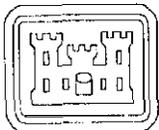
DoD Climate Change Fuel Cell Program

- Initiated in FY1995
- Provides rebates of \$1000/kW up to 1/3 of installed cost



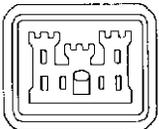
FY1995 Appropriation

- Managed by ODUSD (ES)
- Executed by METC (now FETC)
- Rebates awarded for 41 ONSI
PC25 200 kW PAFC's



FY1996/FY1997 Appropriations

- Managed by ARDEC
- Executed by ARDEC
- Rebates awarded for 53 ONSI
PC25 200 kW PAFC's



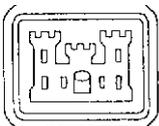
FY1998 Appropriation

- Managed by USACERL
- Executed by FETC
- Rebates awarded for:
 - 15 ONSI PC25 200 kW PAFC's
 - 90 PlugPower 7 kW PEMFC's
 - 16 Analytic Power 3 kW PEMFC's
 - 1 Siemens Westinghouse 300 kW SOFC



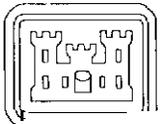
FY1999 Appropriation

- Managed by USACERL
- Executed by FETC
- \$2.4 Million available
- Solicitation available October 1999
- Applications due May 2000



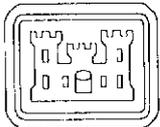
Application Rating Criteria

- Firmness of financial commitment (40%)
- Site Information (20%)
- DoD relationship (20%)
- Uniqueness of project (20%)



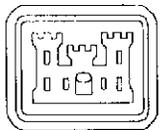
Firmness of Financial Commitment

- Signed contract for purchase of FCPP(s)
- Letters of commitment from funding source



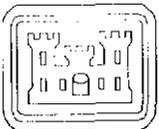
Site Information

- . Project schedule
- Installation details
- NEPA certification
- Letter of intent from end user and installation site authority



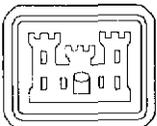
DoD Relationship

- DoD installation
- DoD related installation
- Education/University/Other Government/Commercial Installation that primarily supports DoD's mission
- Non DoD installation in the U.S.
- Non DoD installation in a foreign country



Uniqueness of Project

- Emerging technologies
- Alternate fuels
- Premium power applications
- Multiple units operating together
- Unique electric/thermal interface applications
- Other unique features



FY2000 Appropriation

- Managed by USACERL
- Executed by FETC
- \$5 Million earmarked

