What is the scope of your proposed activity?
Design and fabricate the Electron Cyclotron (EC) Heating and Current Drive system, including the following ITER procurement packages: Equatorial Launcher, Upper Launcher, Transmission Line, RF Power Sources and Controls, and Power Supplies.

In which phase(s) would the activity be conducted?
- Pre-construction (2003-5)
  Refine performance requirements based on results from ongoing physics experiments
  Develop and test prototype ITER hardware
  Define, design, and build a test facility to test prototypes and production components and fully integrated ITER EC system
- Construction (2006-13)
  Fabricate and test the ITER EC components, and possibly install and commission them at the ITER site
- Research (2014-34)
  Perform physics experiments on ITER using the EC system for plasma heating, control, and current drive

In which phase(s) would the US benefit be realized?
- Pre-construction (2003-5)
  Continued growth in EC technology base
- Construction (2006-13)
  Continued growth in EC system performance
- Research (2014-34)
  Continued growth in EC heating and current drive physics and plasma control

What do you see as the US interest in the programmatic area of your proposed activity?
EC systems will continue to be a key tool in achieving and exploring Advanced Tokamak regimes in ITER and for DEMO
For design and fabrication activities, what do you see as the US interest in performing the design and fabrication scope in your proposed activity?

Following up on its pioneering history over two decades in developing EC technology and physics

Indicate the nature(s) of the proposed activity:

- US preparations for Negotiations
  Negotiate for the procurement packages to supply all or some of the components of the ITER EC Heating and Current Drive system

- US preparations for the Construction Phase
  Perform necessary R&D to develop prototype EC components to meet the ITER performance requirements
  Prepare procurement packages for fabrication of the ITER EC components by US industry

- US preparations for the Research Phase
  Continue strong internal US EC physics program to support ITER EC system development and physics personnel

- R&D and design work
  Refine EC system performance requirements based on results from ongoing physics experiments
  Develop and test prototype ITER hardware
  Develop detailed layout and design of ITER EC system
  Define, design, and build a test facility to test prototypes and production components and fully integrated prototype ITER EC system

- Fabrication of US components/systems
  Fabrication and test of the ITER EC components, including the Equatorial Launcher, Upper Launcher, Transmission Line, RF Power Sources and Controls, and Power Supplies

- Preparation of tools for the Research Operations Phase
  Exploit the synergism between the US RF physics research scientists, with their codes and experience, and the hardware expertise of the labs, universities, and industry, to produce the EC system that is needed to support the experimental program of ITER

- Other: ____________________________