# PERSPECTIVES FROM ORNL'S RESEARCH AND DEVELOPMENT STAFF

Tom Wilbanks Chair, Corporate Fellows Council, ORNL

> Pre-proposal Conference May 4, 1999

### A WORD ABOUT THE CORPORATE FELLOWS COUNCIL:

- "Corporate Fellows" are ORNL's highest-level research and development staff members -- about 20 in number
- Title dates back to 1976: levels on the research ladder equivalent to top levels of management
- Corporate Fellows Council established by Al Trivelpiece
- The Council serves as a voice for the R&D staff on issues related to the health and productivity of the R&D environment
- The Council also assists lab management in communicating with R&D staff, as requested

#### WHY THIS PRESENTATION?:

- A reminder of the "ends" for which the management contract is a "means"
- Some background information relevant to the R&D part of the SOW
- An effort to make this background equally available to all potential bidders for the contract
- An indication of the ORNL staff interest in working with the new contractor to assure a smooth transition

### WHAT ORNL IS HERE FOR (THE RFP SPEAKS FOR US):

- To advance the frontiers of science and technology through broad interdisciplinary R&D programs that answer fundamental questions
- To solve technical problems (locally, regionally, nationally, and internationally)
- To develop and apply technologies to address societal needs

### WHAT MAKES ORNL DIFFERENT FROM MANY OTHER DOE LABS AND FEDERAL R&D FACILITIES:

- Our size and diversity
- The Weinberg vision of national laboratory roles: issue-oriented, gap-filling relevance combined with world-class S&T excellence
- A redeployment tradition for more than three decades
- Innovativeness regarding partnerships
- Our management experience
  - A longstanding tie with industry
  - Recently managing ourselves

### HOW ORNL WORKS INTERNALLY AS AN R&D INSTITUTION:

- A significant shift over the past two decades in how projects are initiated -from top-down to bottom-up
- An increasingly strong dependence on decentralized linkages with sponsors and other user communities -- reflecting realities in the funding environment
- Effective decentralized performance depending heavily on the health of the R&D environment: morale, idea generation, assistance with problem-solving, cost containment
- Presents some management challenges, e.g.:
  - National labs are most clearly needed for broad interdisciplinary attacks on longterm problems, but who will support them?
  - The host of smaller decentralized R&D projects might not preserve the Lab's excellence in the long run:
    - ? In core competencies
    - ? In R&D facilities
  - Decentralized entrepreneurship may not exhibit a consistent understanding of national lab roles

## SOME OF THE CHALLENGES ORNL FACES (ALONG WITH OTHER NATIONAL LABS):

- Adapting to changing conditions:
  - Shrinking federal government support for R&D (in the aggregate)
  - Questions about competing appropriately
  - Increasing accountability for payoffs from R&D investment
  - Increased emphasis on ES&H
- Adapting to changing societal needs:
  - Some evident current U.S. S&T needs are uncomfortable fits for DOE national labs: e.g., increasing U.S. global economic competitiveness
  - A lack of widespread consensus about national lab roles
  - The new challenge of connecting with the local area -- not an ORNL tradition

#### PARTICULAR CONCERNS OF ORNL'S R&D STAFF:

- The need for a strategic vision for ORNL in a changing context for DOE national labs
- Rising bottom-line costs -- although a few overhead functions need to be protected from indiscriminate cost-cutting
- Continuing anxiety about job security
- Tension between opportunism in chasing funding vs. imperatives in assuring world-class competencies
- An apparent erosion of the talent base
- Management-staff communication
- Helping to assure a smooth transition