

5.5.2 The DOE Role

All the research on CIRA was conducted at Lawrence Berkeley Laboratory with funds from OBCS. There was no private sector involvement in the development of this technology. Research on CIRA began in 1980 at LBL and the first version was released in 1982. CIRA has not been patented or copyrighted, and LBL has given a license or simply permission to use it to everyone who has applied; thus, the technology is in the public domain.

5.5.3 Commercialization

LBL has been selling CIRA since 1982 at the cost price of \$250. The package includes manuals and computer disks. Burt Hill Kosar Rittelmann Associates of Pennsylvania, a private firm, is marketing CIRA under its own brand name - EEDO. EEDO is the PC version of CIRA and contains 99% of the same program as CIRA. Around 125 copies of EEDO have been sold since sales first began in 1984. The current price of EEDO is \$395 which includes documentation (Shank, 1988). There are no other programs on the market that closely resemble CIRA.

5.5.4 Future Directions

Though software is ever evolving, no further development is planned for CIRA because individual users can modify the program to their own specific needs. There has been no DOE funding for CIRA for a number of years, and none is planned for the near future (Boulin, 1988). Since Howard Ross, the original DOE program manager left his job, the development of CIRA has not been closely tracked by the DOE.

CIRA is a limited commercial success. There have been and continue to be applications of the program in both the public and private sectors. EEDO is still