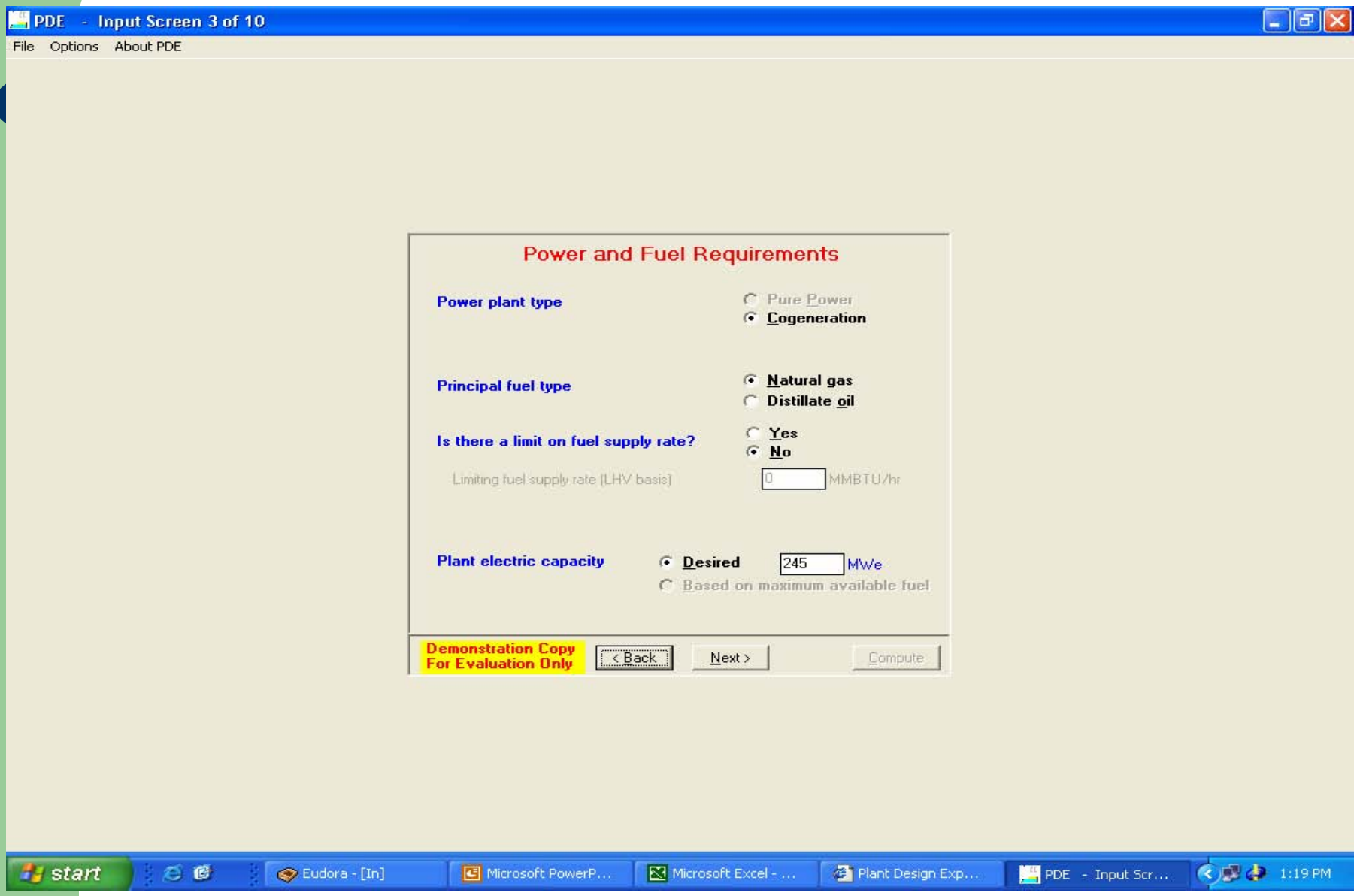
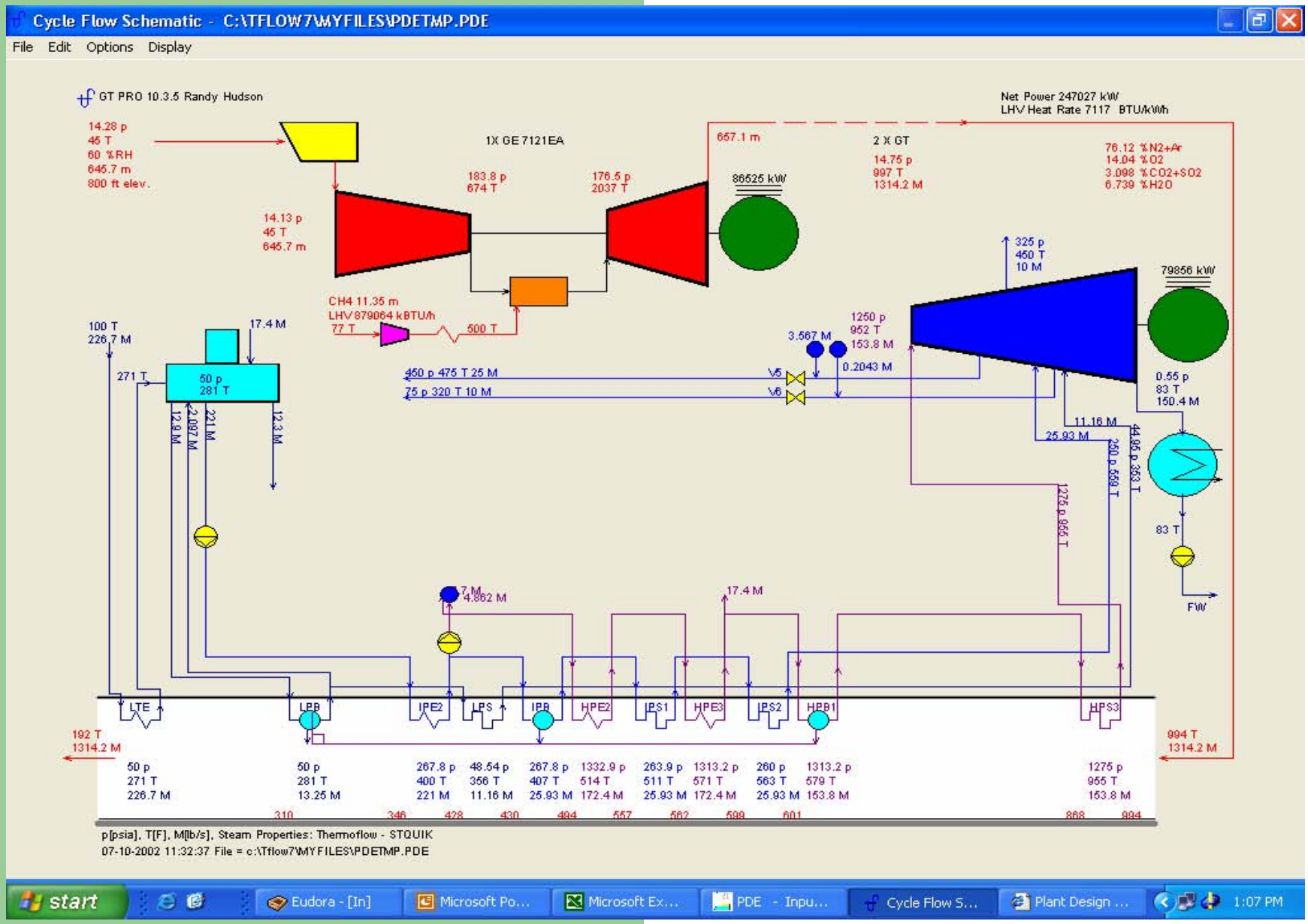
Plant Design Expert (PDE)

- Developed by Thermoflow, Inc.
- Primary use: Preliminary design/screening of industrial cogeneration applications using gas turbines
- Provides baseline comparison (grid electricity and separate boiler)
- *Very* limited user input; most selections made by program
- Equipment data library: Gas turbine performance data
- CHP applications: Process steam, hot water
- Analysis duration/time step: unknown; annual
- Economic analyses: Simplistic IRR only
- Cost: $3,000. (http://www.thermoflow.com/)
- Demo CD available

PDE Input Is Through On-Screen Windows



PDE Provides Text and Graphical Output



PDE Output

- Preliminary conceptual plant design
- Heat balance
- Power and energy output capacities
- Internal rate of return based on user-supplied cost data