



240 481 UF25

gathered  
R.C. 1940

Southeastern Electric Company (D)

The following is a simplified business situation in which Southeastern Electric Company is to negotiate with RCI, Inc. for purchase of steam during the calendar year 1983. The information in Part I of this case is known to both parties. The information in Part II is strictly internal to Southeastern. As this case is intended as an exercise, please ignore the effects of taxes and the time value of money.

ANSWER

RCI Inc. was set up with maximum venture capital of \$15 million for the sole purpose of building and operating a resource recovery plant for Westborough County. On completion, the plant will receive all of Westborough's residential and commercial refuse, recover usable materials for resale, and burn the residue, both to reduce it in size for landfill purposes and to produce steam which may then be sold.

You have been put in charge of negotiating with RCI for purchase of that steam during the calendar year 1983. On January 1, 1984 Southeastern will convert from oil to 100% nuclear energy and will thus have no further use for the steam. RCI had been unable to obtain a commercial loan for the project, but, at Westborough's urging, the state had issued pollution bonds to provide RCI with the \$40 million it required, interest free. You share RCI's belief that construction will cost exactly \$50 million and take exactly one year (the calendar year 1982). RCI will put in \$10 million for construction. (RCI apparently negotiated away any construction profit in return for exclusive title to all by-products of the plant, including the steam. When operational, the plant will produce steam with an annual usable energy equivalent of 100,000 barrels of oil.)

You have learned that Acme Company has offered to buy all of RCI's steam for the six winter months (November to April inclusive) of each year at a 20% discount from the price of oil prevailing on January 1 of each year. Any deal between Southeastern and RCI for 1983 would not affect this offer for subsequent years.

Acme intends to use the steam directly for its internal heating system, but Southeastern requires electricity and would need to build a

- 2 -

generating facility near to the RCI plant to convert the steam into electricity. Such a generating facility would take one year to build at a cost of \$1,000,000. The facility's location and design is such that is is of no use to anyone but Southeastern, and will have no salvage value if not needed by them.

Part II

Southeastern has been hurt greatly in the past by vast swings in the price of oil. Its own forecasts suggest that by January 1, 1983 the price of oil could be anywhere between \$30 and \$50 per barrel with all intermediate prices equally likely.

The deal with RCI is potentially attractive, not only as a way to soften the impact of oil price movements, but also as a gesture of goodwill towards the spirit of environmental preservation and energy conservation at a time when you are receiving bad publicity from opponents of nuclear power. However, Southeastern is concerned at the failure rate of resource recovery facilities similar to that being built by RCI. You know that these plants either work to specifications or fail completely (with zero salvage value). You estimate the probability that the plant will work as 0.4.

You realize that Southeastern regards it as crucial to its image that it be seen as accommodating as possible to resource recovery efforts. However, you also realize that the company has a commitment to its customers and that you will be judged on the "value added" (calculated in terms of the probabilities and dollar figures given above) to the utility by the contract you sign. \*