Leckenby Company

Sunday, August 4 Paul Arnold, Regional Representative of the United Ironworkers Union, has firmly announced that the members of his union employed at Leckenby Company will go on strike in two days unless their wage demands are met. Alex Kunzler, President of Leckenby, received the threat without showing any emotion, although he realized the potentially explosive impact of a strike at this particular time.

Leckenby Company

Leckenby Company is a small steel fabricating firm located in Seattle, Washington. Founded in 1945, the company experienced relatively little growth during the forties and fifties. In 1960, the company landed a major contract building a missile base for the U.S. government on Kwajalein Atoll in the Pacific, which spurred its growth in that decade. A subsidiary, Ben Steel Company, which was located in Japan, also prospered during this period. In the seventies, the boom continued as Leckenby tied its fortunes to the rapidly expanding nuclear power industry.

By the 1980s, however, Leckenby was suffering through difficult times: litigation had dramatically reduced the demand for new construction in the nuclear power industry, and the entire U.S. steel industry was suffering from the explosion of inexpensive foreign imports. The current financial situation caused Leckenby management to fear that a strike on August 6 could lead to the firm's demise.

The Wage Negotiations

Kunzler and Arnold had been negotiating for several months. They had reached agreement on every issue except the wage rate, which was currently $13 per hour. Kunzler argued that the company could no longer be competitive unless wages fell significantly. After the months of intense bargaining, he now insisted that $10 per hour was the maximum wage that would leave the firm competitive. Arnold, sensitive to the plight of the company, had very reluctantly accepted the concept of a wage rollback. After the tough negotiations so far, however, he was strongly holding out for a wage level of at least $11 per hour. For four weeks the parties had held fast to these offers. Finally, Arnold moved to break the impasse by announcing that his workers would go on strike unless agreement was reached in two days.

Thomas T. Weeks prepared this revised version of a case under the supervision of Professor David A. Lax as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

In order to convince Arnold that Leckenby was in serious financial trouble, Kunzler had opened the company books to the union representative. Therefore, the parties were in agreement about the impact of any wage settlement: the firm's costs would increase by $5,000,000 for every one dollar increase (over $10) in the hourly wage (with fractional increases having directly proportional effects). This figure includes both the increase in wages paid and the expected decrease in revenues resulting from reduced competitiveness.

The benefit to the union workers of increased wages is a function of the number of hours worked. Since they work four million hours per year, the income to the ironworkers increases by $4,000,000 for every dollar increase in the hourly wage (over ten dollars). An appendix presents the formulas for calculating the payoffs to both parties. (It is not necessary, however, to study the formulas in order to negotiate effectively.)

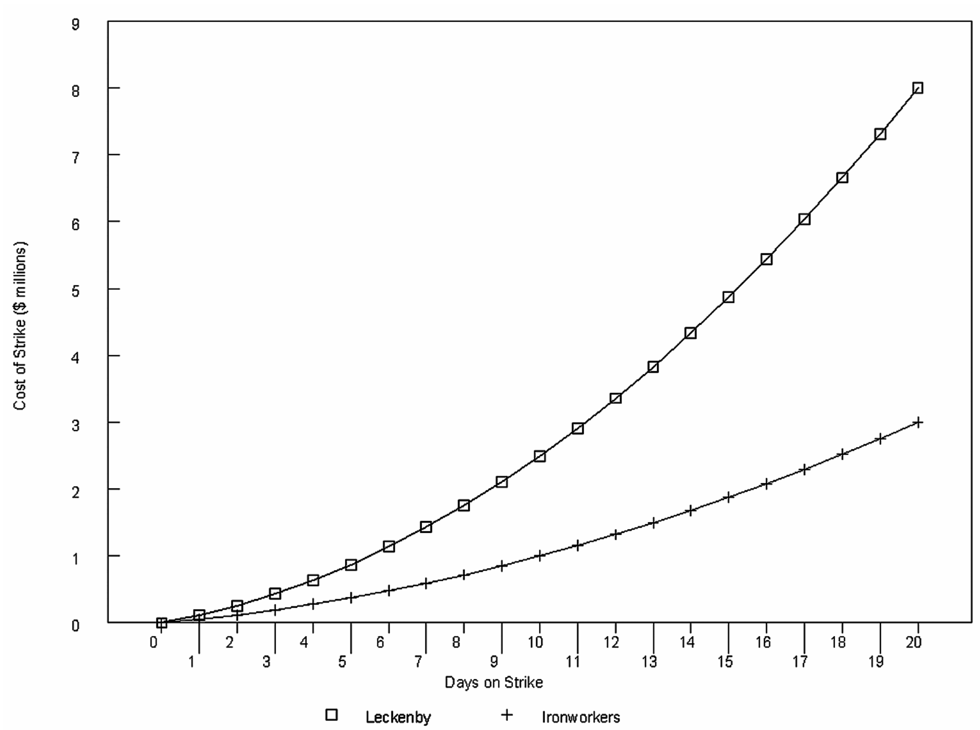
The Cost of a Strike

Despite the tenor of the negotiations to date, Kunzler and Arnold realized their joint interest in the health of Leckenby Company, and both recognized the negative impact of a strike on both parties. They agreed that the costs of a strike would be as follows:

Cost of a Strike

Days on Strike	Cost to Leckenby	Cost to Ironworkers
0	$ 0	$ 0
1	115,000	55,000
2	260,000	120,000
3	435,000	195,000
4	640,000	280,000
5	875,000	375,000
6	1,140,000	480,000
7	1,435,000	595,000
8	1,760,000	720,000
9	2,115,000	855,000
10	2,500,000	1,000,000
11	2,915,000	1,155,000
12	3,360,000	1,320,000
13	3,835,000	1,495,000
14	4,340,000	1,680,000
15	4,875,000	1,875,000
16	5,440,000	2,080,000
17	6,035,000	2,295,000
18	6,660,000	2,520,000
19	7,315,000	2,755,000
20	8,000,000	3,000,000

While analyzing the costs of the strike to the respective parties, note that the negotiation is not entirely symmetrical. The costs to both parties increase geometrically, but Leckenby Company's costs escalate more rapidly. The asymmetry is illustrated by the following graph:



Rules Governing the Negotiation

Arnold and Kunzler will meet on August 4 to search for an agreement about the wage rate. By this point in what has been a very lengthy and, at times, a bitter process, the two sides have heard each other's arguments and rationales many, many times. They have both concluded that only numbers—what each is willing to settle for—have any meaning in the negotiation process. So, in order to break the impasse, they have agreed to some innovative rules. These rules are strictly binding, with no exceptions allowed.

1. Negotiations are to be conducted through a daily exchange of bids. Bids are to be exchanged on 3 x 5 cards, or some similar means. The only information to be printed on the cards is an hourly wage rate. The bid for a given round must be written on the card immediately before the exchange of cards for that round.

2. Parties are to refrain from talking to each other during the negotiations. The only communication allowed is the bid submitted on the card. (This rule reflects the fact that, at this point, "mere" words don't matter.)

3. Both parties have agreed that successive bids by Kunzler cannot decrease and those by Arnold cannot increase. Similarly, Kunzler's opening bid cannot be less than $10, and Arnold's cannot be more than $11.

4. The daily bids are to be disclosed simultaneously. If Arnold's bid is greater than Kunzler's, negotiations continue the next day. If Arnold's bid is less than Kunzler's, agreement is reached; the settlement is the midpoint between the two bids.

(Mathematically, this is calculated by adding Arnold's bid and Kunzler's bid, then dividing their sum by two).

5. The strike deadline is August 6; two negotiating periods remain before the ironworkers' strike. If an agreement is reached in the first or second negotiating period (the first two exchanges of bids), the strike is averted and no penalties accrue. The strike automatically begins on the third day, at which point penalties begin. If, for instance, an agreement is reached in the fifth negotiating period, there are three days of strike penalties.

6. The union can strike for exactly 20 days before its treasury runs out; at that time, Arnold must accept Kunzler's final offer. Thus, if no agreement is reached on the twenty-second exchange of bids, the parties settle at the level of Kunzler's final offer, and the full strike penalty is imposed on both parties.

You will be assigned a role and a counterpart for this negotiation. You are to follow the aforementioned rules to the letter. Those assigned the Arnold role must maximize the difference between the union's gain from increased wages and their cost resulting from a strike. Those assigned the Kunzler role must minimize the sum of the cost to Leckenby of increased wages and their penalty resulting from a strike. The appendix presents the formulas for calculating the payoffs of the parties.

Remember also that the objective of the union player (Arnold) is not to "do better than the management players" (Kunzler), but better than other union players (who are all in identical situations). Similarly, the "Kunzlers" must attempt to outperform other "Kunzlers," not their union counterparts.

Please complete the attached negotiation record.

APPENDIX

Calculating the Payoffs

Everything has been irrevocably set by the negotiators except the wage rate. The present rate is \$13. Kunzler is demanding that the hourly wage be rolled back to \$10, and Arnold will accept no less than \$11. The payoffs of the parties are a function of w, the incremental wage paid to the ironworkers. That is, w equals the wage rate minus \$10 (the management offer). For example, if agreement is reached at a wage of \$10.75, then $w = 10.75 - 10 = 0.75$.

Cost of wage rate (w) to Kunzler: $\$5,000,000 \times w$

Benefit of wage rate (w) to Arnold: $\$4,000,000 \times w$

If the negotiations go on beyond the second period ($p = 2$), then a strike is called by Arnold. The costs to the parties are a function of d, the number of days on strike. ($d = p - 2$)

Cost of strike to Kunzler: $\$100,000d + \$15,000\, d^2$

Cost of strike to Arnold: $\$\ 50,000d + \$5,000\, d^2$

The payoffs to the parties are a function of these two factors, incremental wages (w) and days on strike (d).

Costs to Kunzler: $(5,000,000 \times w) + (100,000d + 15,000\, d^2)$

Benefit to Arnold: $(4,000,000 \times w) - (\ 50,000d + 5,000\, d^2)$

Illustration: If Arnold and Kunzler agree to a wage of \$10.50 ($w = .50$) after seven bidding rounds ($p = 7$, $d = 5$), then their payoffs would be determined as follows:

Costs to Kunzler:
$(5,000,000 \times .5) + (100,000(5) + 15,000\ (5^2)) = \$3,375,000$

Benefit to Arnold:
$(4,000,000 \times .5) - (\ 50,000(5) + \ 5,000\ (5^2)) = \$1,625,000$

Negotiation Record **TO KEEP**

Time		Wage Proposals		Cost of Strike	
Period (p)	Days on Strike (d)	Kunzler	Arnold	Kunzler	Arnold
1	0			0	0
2	0			0	0
3	1			115,000	55,000
4	2			260,000	120,000
5	3			435,000	195,000
6	4			640,000	280,000
7	5			875,000	375,000
8	6			1,140,000	480,000
9	7			1,435,000	595,000
10	8			1,760,000	720,000
11	9			2,115,000	855,000
12	10			2,500,000	1,000,000
13	11			2,915,000	1,155,000
14	12			3,360,000	1,320,000
15	13			3,835,000	1,495,000
16	14			4,340,000	1,680,000
17	15			4,875,000	1,875,000
18	16			5,440,000	2,080,000
19	17			6,035,000	2,295,000
20	18			6,660,000	2,520,000
21	19			7,315,000	2,755,000
22	20			8,000,000	3,000,000

Your Participant Number: ________ Your Pairing (Group) Number ______________

Your Name: ____

Your Counterpart's Name: ____

Circle *your* role: Arnold (Union) Kunzler (Management)

Did you negotiate in your assigned role? Yes: ____ No: _____

Did you negotiate with your assigned counterpart? Yes: ____ No:_____

Results: Days of Strike, *d* (between 0 and 20): ____________________

Incremental Wage, *w* (between $0 and $1.00): ____________________

Your Net Outcome (in $millions): ____________________

Negotiation Record **TO HAND IN**

Time		Wage Proposals		Cost of Strike	
Period (p)	Days on Strike (d)	Kunzler	Arnold	Kunzler	Arnold
1	0			0	0
2	0			0	0
3	1			115,000	55,000
4	2			260,000	120,000
5	3			435,000	195,000
6	4			640,000	280,000
7	5			875,000	375,000
8	6			1,140,000	480,000
9	7			1,435,000	595,000
10	8			1,760,000	720,000
11	9			2,115,000	855,000
12	10			2,500,000	1,000,000
13	11			2,915,000	1,155,000
14	12			3,360,000	1,320,000
15	13			3,835,000	1,495,000
16	14			4,340,000	1,680,000
17	15			4,875,000	1,875,000
18	16			5,440,000	2,080,000
19	17			6,035,000	2,295,000
20	18			6,660,000	2,520,000
21	19			7,315,000	2,755,000
22	20			8,000,000	3,000,000

Your Participant Number: ________ Your Pairing (Group) Number ______________

Your Name: ____

Your Counterpart's Name: ____

Circle *your* role: Arnold (Union) Kunzler (Management)

Did you negotiate in your assigned role? Yes: ____ No: _____

Did you negotiate with your assigned counterpart? Yes: ____ No:_____

Results: Days of Strike, d (between 0 and 20): ____________________

Incremental Wage, w (between \$0 and \$1.00): ____________________

Your Net Outcome (in \$millions): ____________________

Briefly, what two lessons seem most important to you as a result of this negotiation? (On back.)