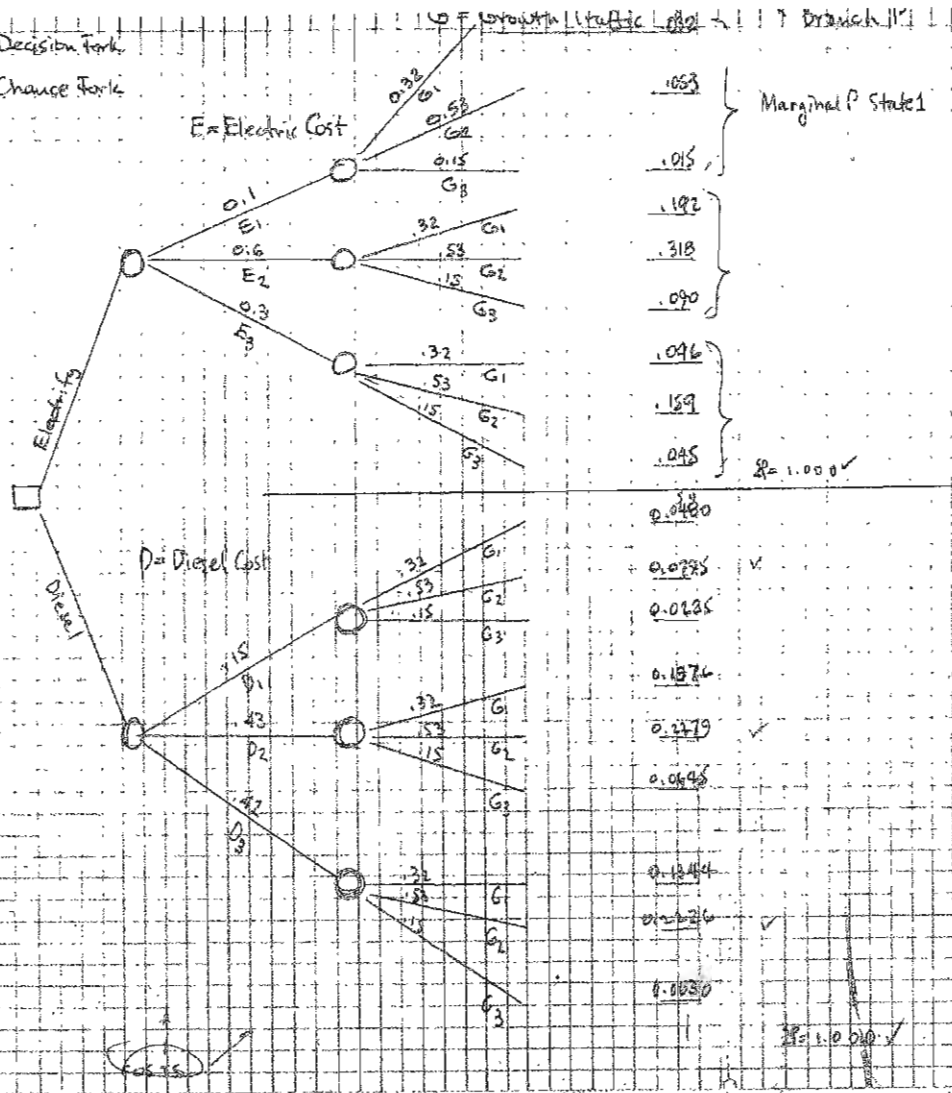


□ - Decision Fork  
○ - Chance Fork



Marginal P State

0.053	}
0.015	
0.192	
0.318	}
0.090	
0.096	
0.159	}
0.045	
Σ = 1.000 ✓	

States →  
Outcomes

E <sub>1</sub>	
G <sub>1</sub>	(.1)(.92)
G <sub>2</sub>	(.1)(.08)
G <sub>3</sub>	(.1)(.15)
Many Prob State	Σ =

0.0420	}
0.0725	
0.0235	
0.1576	}
0.2779	
0.0696	
0.1244	}
0.2276	
0.0530	
Σ = 1.000 ✓	

0.35

by following to end.

Electric Power Consumption: 259,625,000 kWh/yr. @ 7.75 mills/kwh (January 1974)  
 Diesel Fuel Consumption: 14,869,432 gal/yr @ 12.4 ¢/gal

Decision Tree Branches (P)	Year												
	Year 1 1974	Year 2 Cost	Year 1 EMV	Year 3 Cost	Year 3 EMV	Year 4 EMV	Year 5 EMV	Year 6 EMV	Year 7 EMV	Year 8 EMV	9	10	11
E <sub>1</sub> G <sub>1</sub> 0.032	2012094	2052407	65079	2093691	66990								
E <sub>1</sub> G <sub>2</sub> 0.053		2076783	110000	2143489	413605								
E <sub>1</sub> G <sub>3</sub> 0.015		2123262	31849	2240572	33600								
E <sub>2</sub> G <sub>1</sub> 0.192	2012094	2062698	396030	2111175	405990								
E <sub>2</sub> G <sub>2</sub> 0.310		2087005	663693	2164071	688429	74007	74070	760307	769942	798630	828400	859277	891800
E <sub>2</sub> G <sub>3</sub> 0.090		2112699	190143	2240517	201646								
E <sub>3</sub> G <sub>1</sub> 0.096	2012094	2072909	190999	2132563	205014								
E <sub>3</sub> G <sub>2</sub> 0.189		2097417	333409	2186350	307601								
E <sub>3</sub> G <sub>3</sub> 0.245		2144309	96490	2285302	102042								
D <sub>1</sub> G <sub>1</sub> 0.0400	1843009	1908095	91627	1976279	94001								
D <sub>1</sub> G <sub>2</sub> 0.0795		1931464	153551	2023206	100051								
D <sub>1</sub> G <sub>3</sub> 0.0225		1974719	44431	2114924	47006								
D <sub>2</sub> G <sub>1</sub> 0.1376	1843009	1936967	266527	2034032	279993								
D <sub>2</sub> G <sub>2</sub> 0.2379		1959000	446654	2083232	474700	500000	500417	570101	600077	640071	680071	720071	760071
D <sub>2</sub> G <sub>3</sub> 0.0646		2003759	129242	2127505	130400								
D <sub>3</sub> G <sub>1</sub> 0.1344	1843009	1965039	264101	2094240	281466								
D <sub>3</sub> G <sub>2</sub> 0.2326		1980171	442509	2144052	477366								
D <sub>3</sub> G <sub>3</sub> 0.0620		2032799	128066	2241161	141193								

DATE APPLIED TO PROJECT OF 1974

01 # 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 | 210 | 220 | 230 | 240 | 250 | 260 | 270 | 280 | 290 | 300 | 310 | 320 | 330 | 340 | 350 | 360 | 370 | 380 | 390 | 400 | 410 | 420 | 430 | 440 | 450 | 460 | 470 | 480 | 490 | 500 | 510 | 520 | 530 | 540 | 550 | 560 | 570 | 580 | 590 | 600 | 610 | 620 | 630 | 640 | 650 | 660 | 670 | 680 | 690 | 700 | 710 | 720 | 730 | 740 | 750 | 760 | 770 | 780 | 790 | 800 | 810 | 820 | 830 | 840 | 850 | 860 | 870 | 880 | 890 | 900 | 910 | 920 | 930 | 940 | 950 | 960 | 970 | 980 | 990 | 1000



1	2	3	4	5	6	7	8	9	10	11	12	13
12	13	14	15	16	17	18	19	20				
924521	958978	994719	1031792	1070747	1110135	1151510	1194427	1238943				
822332	878088	939119	987527	1048781	1115232	1186674	1260781	1340088				

21 | 15 | 20 | 30 | 400610  
 25 | 15 | 004128

YEARLY PROJECTED INCREASE - PER CENT  
(UPPER FIGURE IS ESTIMATED  
PROBABILITY OF OCCURRENCE.)

VARIABLE

COST OF ELECTRIC POWER	0.10 pr	0.60	0.30
	0.5%	1.0	1.5
COST OF DIESEL FUEL	0.15	0.43	0.42
	2.0	3.5	5.0
GROWTH OF TRAFFIC	0.32	0.53	0.15
	1.5	2.7	5.0

TRIAL NUMBER	ANNUAL GROWTH RATES			PROBABILITY
	ELECT POWER	DIESEL FUEL	TRAFFIC	
1	0.5	2.0	1.5	0.00480 ✓
2	0.5	2.0	2.7	0.00795 ✓
3	0.5	2.0	5.0	0.00225 ✓
4	0.5	3.5	1.5	0.01376 ✓
5	0.5	3.5	2.7	0.02279 ✓
6	0.5	3.5	5.0	0.00645 ✓
7	0.5	5.0	1.5	0.01314 ✓
8	0.5	5.0	2.7	0.02226 ✓
9	0.5	5.0	5.0	0.00630 ✓
10	1.0	2.0	1.5	0.02880 ✓
11	1.0	2.0	2.7	0.04770 ✓
12	1.0	2.0	5.0	0.01350 ✓
13	1.0	3.5	1.5	0.08256 ✓
14	1.0	3.5	2.7	> 0.13674 ✓
15	1.0	3.5	5.0	0.03870 ✓
16	1.0	5.0	1.5	0.08064 ✓
17	1.0	5.0	2.7	> 0.13356 ✓
18	1.0	5.0	5.0	0.03780 ✓
19	1.5	2.0	1.5	0.01440 ✓
20	1.5	2.0	2.7	0.02385 ✓
21	1.5	2.0	5.0	0.00675 ✓
22	1.5	3.5	1.5	0.04128 ✓
23	1.5	3.5	2.7	0.06837 ✓
24	1.5	3.5	5.0	0.01935 ✓
25	1.5	5.0	1.5	0.04032 ✓
26	1.5	5.0	2.7	0.06678 ✓
27	1.5	5.0	5.0	0.01890 ✓

$\Sigma p = 1.00000$

POWER  
FUEL  
GROWTH

SAMPLE 2 of 4  
RECORD SHEET FOR TRIAL RUNS

Trial # 1

EP 0.5 DF 2.0 TG 1.5 Prob. 0.00485

CASH SAVINGS - 1000'S

Year	Unadjusted	Adjusted for Probability
1	23	0.110
2	40	0.192
3	67	0.321
4	80	0.384
5	90	0.432
6	100	0.480
7	110	0.528
8	125	0.600
9	130	0.624
10	140	0.672

Trial # 2

EP 0.5 DF 2.0 TG 2.7 Prob. 0.00795

Cash Savings - 1000'S

Year	Unadjusted	Adj. for Prob.
1	(42)	(0.334)
2	(22)	(0.175)
3	(10)	(0.079)
4	16	0.127
5	40	0.318
6	50	0.397
7	70	0.552
8	90	0.715
9	110	0.875
10	130	1.034

DLW 9/22/72

IKHL	1	2	ETC
POWER RATE	0.5	0.5	
FUEL RATE	2.0	2.0	
GROWTH RATE	7.5	2.7	
PROBABILITY	0.00480	0.00795	

ANNUAL SAVINGS - UNADJUSTED  
(ARRANGE IN INCREASING ORDER  
OF SAVINGS LEFT TO RIGHT)

3 OF

NOTE: • SUM OF PROBABILITIES TO LEFT OF AND INCLUDING SELECTED COLUMN GIVES PROBABILITY RESULT WILL BE EQUAL TO OR LESS THAN VALUES IN SELECTED COLUMN.

• SUM OF PROBABILITIES TO RIGHT OF AND INCLUDING SELECTED COLUMN GIVES PROBABILITY RESULTS WILL BE EQUAL TO OR GREATER THAN VALUES IN SELECTED COLUMN.

DW 4/21/72

ANNUAL SAVINGS - ADJUSTED FOR PROBABILITY  
 (SUM OF ADJUSTED SAVINGS GIVES MOST PROBABLE RETURN - ORDER NOT IMPORTANT)

TRIAL No. PROBABILITY ADJUSTED SAVINGS				SUM OF ADJUSTED SAVINGS
<p>To ADJUST SAVINGS MULTIPLY VALUE BY THE ASSIGNED PROBABILITY.</p>			<p>27 COLUMNS</p> <hr/> <p>NOTE: - <u>SUM OF ADJUSTED SAVINGS</u>  <u>GIVES THE MOST PROBABLE</u>  <u>RESULT IF PROJECT IS</u>  <u>ADOPTED - GIVEN THE</u>  <u>ASSIGNED GROWTH FACTORS</u>  <u>AND PROBABILITIES.</u></p> <p>(NOTE: - THIS SUM CAN BE          CHECKED AGAINST TABULATION          OF UNADJUSTED VALUES )</p>	

DWS 4/21/72