MAY 2008

EXAM CSP-RU

Company/Sponsor Perspective Retirement Benefits U.S.

CASE STUDY

Case Study - Course CSP Retirement - U.S.

National Oil Company - Background

National Oil Company (NOC) is a large well-established company that services oil wells all over the country of Vosne. NOC has been in existence for over 30 years and has more than 10,000 full-time salaried and union hourly employees and up to a further 5,000 non-skilled seasonal employees during the non-winter months. Approximately one-half of the seasonal employees return for another season. The full-time workforce is reasonably stable, but turnover in the last 5 years has been greater than desired, due to competitors recruiting NOC's employees.

Normally, an undergraduate degree is a minimum requirement to obtain entry to the salaried workforce and many employees have graduate degrees. About half of NOC's salaried employees are recruited directly from university with the other half coming from competitors.

The company's financial position varies with the price of oil. As oil prices rise, oil companies become increasingly active and in turn require the services of NOC. Conversely, activity slows as oil prices drop Despite this, the company is usually in a taxable position.

NOC has managed to be successful by staying on the cutting edge of technology. NOC prides itself in being state of the art in processes and software relevant to its industry. This has helped it to stave off competition from both inside and outside of Vosne. Although NOC is the largest player in the industry within Vosne, there are larger players from outside of the country, with which NOC has to compete. From time to time, there are rumors of a takeover of NOC.

Country of Vosne – Background

Vosne is a modern developed country with a simplified tax system. Both corporations and individuals are subject to income tax at a flat rate of 40%. Reasonable operating expenses, including contributions to Eligible Retirement Plans (ERPs), reduce taxable income.

No pension legislation exists apart from the rules outlined herein.

Rules that apply to gain ERP status are as follows:

General

• if a company has one or more ERPs, then all employees are entitled to be in at least one of the company's ERPs

Defined Benefit Plans (DB ERPs)

- employer contributions may not exceed those recommended by an actuary, in accordance with generally accepted actuarial practice
- employer contributions are an eligible expense to reduce the employer's taxable income
- periodic pensions may not exceed \$3,000 per annum for each year of service regardless of form or commencement age
- periodic pensions cannot commence prior to age 55
- investment earnings generated by the ERP pension fund are not taxable
- pension payments are taxed as received in the hands of the recipient
- no employee contributions are permitted

Defined Contribution Plans (DC ERPs)

- employer contributions for any individual plan member cannot exceed \$20,000 annually
- employer contributions are an eligible expense to reduce the employer's taxable income
- investment earnings generated by the ERP pension fund are not taxable until withdrawn
- benefit distributions are taxed as received in the hands of the recipient
- employer contributions may or may not be dependent on employee contributions
- individuals may contribute up to \$20,000 annually
- such contributions are tax deductible to the individual

The tax assistance available under each of the above two arrangements does not depend on the extent of participation under the other one. For example, an individual could participate in a DC ERP and, if eligible under the plans' rules, also a DB ERP of his or her employer.

Supplemental Retirement Plans (SRPs)

Contributions to a retirement plan that does not meet ERP status are not tax-deductible. Benefits paid to participants under such plans are tax deductible to the company and are taxable to participants, when paid to participants. Such a plan is known as a Supplemental Retirement Plan (SRP). An example of an SRP is a plan that restores the benefits lost by the imposition of the ERP maximums

Retiree Health Care Plans

Employers in Vosne may provide health care benefits to retirees and their spouses through a separate plan which is not intended to qualify for ERP status. Benefits (including insurance premiums) paid under such plans are tax deductible to the company when paid on behalf of participants. Benefits payable as an indemnity for health related services are not taxable to plan participants at any time.

No social security pension system exists in Vosne and there are no state-provided life or health-care benefits.

For financial reporting purposes, Vosne adopted FASB Accounting Standards

The investment market in Vosne is well developed, with substantial trading in government and corporate bonds and equities

Summary of National Oil's Retirement Benefits

NOC maintains three defined benefit plans:

- 1 a final-average pay defined benefit ERP for its full-time salaried employees;
- 2 a unit benefit defined benefit ERP for its full-time hourly union staff; and
- a non-eligible pension plan (referred to as the SRP) for its executives that is supplemental to the This plan has no assets.

In addition, the company has a defined contribution ERP for its seasonal workforce.

Furthermore, eligible full-time salaried and union employees retiring with the company are covered for their lifetime by health benefits.

Extracts of Retirement Benefits Provisions and Financial Information

National Oil Full-Time Salaried Pension Plan

Eligibility

Immediate

Vesting

100% after 5 years of service

Normal Retirement Age

65

Early Retirement Age

55 with 5 years of service

Best Average Earnings

Average annual earnings during 60 consecutive months in

which earnings were highest

Earnings

Base pay, excluding overtime and bonuses

Normal Retirement Benefit

2% of best average earnings times years of service,

subject to tax system maximum

Accrued Benefit

Benefit calculated as under the normal retirement benefit

formula using best average earnings and service as of

date of calculation

Early Retirement Benefit

Accrued benefit reduced by 0.25% per month that early

retirement precedes age 62

Form of Benefit

If married, 50% joint & survivor benefit, without reduction.

If not married, single life annuity

Optional Forms of Benefit

None

Indexing

None

Termination Benefit

Lump sum equal to actuarial present value of accrued

benefit

Pre-Retirement Death Benefit

Lump sum equal to actuarial present value of accrued

benefit payable to named beneficiary

Disability Benefit

None

	2003	2004	2005	2006	2007
Participant Summary - January 1					
Active Participants			<u></u>		
(a) count	4,243	4,293	4,305	4,268	4 287
(b) average age	45 3	45 8	46.1	46.6	47 0
(c) average service	15.5	16 0	16.4	16 8	17 3
(d) average future working lifetime	11.3	11.7	11.0	10.8	11.0
(e) average plan earnings (prior year)	64.000	66,000	68,000	71,000	73 000
Deferred Vested Participants					
(a) count	-	•	-		-
Pensioners (incl beneficiaries)	·				
(a) count	590	612	640	665	697
(b) average age	70.8	70.7	70.5	70.2	69.8
(c) average annual benefit	19,100	19,300	19,500	19,700	20,100

Plan Assets (numbers in \$000's) *

Change in Plan Assets during Prior Year.					
Market Value of Assets at January 1 of prior year	545,745	528 701	674,049	771,730	859,388
Employer Contributions during prior year	31,532	40,145	37,000	39,338	42,134
Benefit Payments during prior year	(14,660)	(15,110)	(19,480)	(20,500)	(22,000
Expenses during prior year	· · - ·		-	-	- ,
Investment return during prior year	(33,916)	120,313	80,162	68,819	124,419
Market Value of Assets at January 1 of current year	528,701	674,049	771,730	859,388	1,003,940
Rate of return during prior year	-6%	22%	12%	9%	14%
Average Portfolio Mix During Prior Year.				"	
(a) Domestic Large Cap Equities	27%	30%	30%	29%	35%
(b) Domestic Small Cap Equities	24%	30%	27%	28%	22%
(c) Domestic Fixed Income	34%	25%	26%	27%	30%
(d) International Equities	8%	11%	13%	11%	9%
(e) Real Estate	3%	2%	2%	3%	2%
(f) Cash	4%	<u>2%</u>	<u>2%</u>	<u>2%</u>	<u>2%</u>
(g) Total	100%	100%	100%	100%	100%
Asset Class Returns during Prior Year		•			
(a) Domestic Large Cap Equities	-14%	25%	15%	13%	23%
(b) Domestic Small Cap Equities	-18%	30%	14%	7%	18%
(c) Domestic Fixed Income	9%	5%	7%	3%	4%
(d) International Equities	-16%	40%	12%	17%	10%
(e) Real Estate	4%	3%	3%	12%	8%
(f) Cash	2%	1%	. 1%	2%	2%

^{*} numbers may not add due to rounding

	2003	2004	2005	2006	2007
Funding Valuation - January 1 (numbers in \$000's) *					
1 Actuarial Accrued Liability:					700 400
(a) Active participants	503,569	589 768	645,138	707,847	720 460
(b) Deferred vested participants	=	-	-	147.005	407.000
(c) Pensioners	92,406	103,942	111,072	117,905	127,909
(d) Total	595 975	693,710	756 210	825 751	848 369
2 Actuarial Value of Assets	528,701	674 049	771,730	859 388	1,003 940
3. Unfunded Actuarial Accrued Liability: (1d)-(2)	67 274	19,661	(15,520)	(33 636)	(155,572)
4. Normal Cost (beg. Of year)	32,488	36,860	39,338	42,134	41,645
5. Change in Unfunded AAL during prior year.					
(a) Unfunded AAL at prior valuation date	3,906	67,274	19,661	(15 520)	(33,636)
(b) Adjustment for Interest	313	5,382	1,376	(1 048)	(2.186
(c) Normal Cost w/interest less contributions	298	(6 663)	1,146	1,327	1,369
(d) (Gain)/Loss on investment	78,250	(77,015)	(32,365)	(16,092)	(67,904
(e) (Gain)/Loss on termination	(2,200)	(2,100)	(8,100)	(11 000)	(8,000)
(f) (Gain)/Loss on salary increases less than expected	(12,000)	(5,000)	(7,000)	2 000	(4,000)
(g) (Gain)/Loss on mortality	200	(1,400)	(4,000)	(6 800)	1,000
(h) (Gain)/Loss on retirement	(1 200)	(2,800)	(4,700)	(7 400)	(5 000
(i) (Gain)/Loss on assumption changes	` -	42,000	19,100	21,000	(37,000)
(j) (Gain)/Loss on expenses	_	44	-	u ₁	-
(k) (Gain)/Loss on all other factors	(293)	(16)	(639)	(104)	(214
(I) Unfunded AAL at current valuation date	67,274	19,661	(15,520)	(33,636)	(155,572)
6. Actuarial Basis					
(a) Interest	8.00%	7.00%	6.75%	6.50%	6 75%
(b) Salary scale	5.00%	4 00%	3.75%	3 50%	3 50%
(c) Consumer Price Index	3.50%	3 50%	3.00%	3 00%	3.00%
(d) Mortality			GAM83	1.002	
(e) Turnover		Based on NOC	experience for 19	986-1988	
(f) Retirement age			Age 62		
(g) Proportion married and age difference	80% mai	rried, male spous	e 3 years older t	han female spou	ıse
(h) Expenses			penses paid by c	ompany	
(i) Asset Valuation Method			t value of assets		
(i) Actuarial Cost Method		Proje	cted unit credit		

^{*} numbers may not add due to rounding

misionical Actual.	iai valuation results	

Expense Valuation - January 1 (numbers in \$000's) *	2003	2004	2005	2006	2007
Reconciliation of funded status at valuation date:		<u></u>	<u></u>		
	(104.057)	(545.104)	(550, 050)	(000 400)	(665 121)
(a) Accumulated Benefit Obligation	(461 857)	(513,481)	(559 852)	(636,422) (979,111)	(1,023,263)
(b) Projected Benefit Obligation	(710,550)	(789,971)	(861,311) 771 730	859,388	1,003,940
(c) Fair Value of Assets	528,701	674,049		(119,724)	(19,323)
(d) Funded Status: (b) + (c)	(181,849)	(115 922) 32 604	(89,581) 1,950	28,400	(70,662)
(e) Unrecognized (gains)/losses	99,393	*		•	, , ,
(f) Prepaid/(Accrued) expense	(82 456)	(83,318)	(87,631)	(91.324)	N/A
2. Pension Expense:					
(a) Service Cost (beg. of year)	38,986	44,434	47,699	50,021	52,056
(b) Interest Cost	48,243	51,678	53,956	56,039	61,198
(c) Expected return on assets	(48,730)	(54,799)	(58,624)	(65,265)	(70,963)
(d) Amortization of past service cost		· -			- [
(e) Amortization of net actuarial (gain)/loss	2 508	iA.	-	-	-
(f) Pension Expense for year	41.007	41 313	43,031	40,795	42 291
3. Actuarial Basis and Supplemental Data					
(a) Discount rate	6 50%	6 25%	6.00%	5 50%	5 75%
(b) Return on assets	9 00%	8.00%	7 50%	7 50%	7.00%
(c) Salary scale	4.00%	4 00%	3.75%	3 50%	3.75%
(d) Consumer Price Index	3.50%	3.50%	3.00%	3 00%	3 00%
(e) Mortality			GAM83		i
(f) Turnover			experience for 19		
(g) Proportion married and age difference	80% maπ	ied; male spouse	es 3 years older ti	han female spou	ises
(h) Retirement age			Age 62		- 1
(i) Expenses			penses paid by c	ompany	. 1
(j) Asset Valuation Method			t value of assets		į
(k) Actuarial Cost Method		•	ected unit credit		
(I) Employer contributions	40,145	37,000	39,338	42,134	41,645
(m) Benefit payments	(14,660)	(15,110)	(19,480)	(20,500)	(22,000)

^{*} numbers may not add due to rounding

National Oil Full-Time Salaried Pension Plan Reconciliation of Plan Participants (2003 - 2007)

	Active	Pensioners/ Beneficiaries	Total
1. Participants as of January 1, 2003	4,243	590	4,833
- New Entrants/Rehires	375		375
- Terminated Nonvested	(120)	•	(120)
- Terminated Vested (Lump Sum Cashout)	(175)	- i	(175)
- Retirement	(28)	28	-
- Death w/ Beneficiary	(2)	2	
- Death w/o Beneficiary		(8)	(8)
- Net change	50	22	72
2. Participants as of January 1, 2004	4,293	612	4,905
- New Entrants/Rehires	400	-	400
- Terminated Nonvested	(150)	-	(150)
- Terminated Vested (Lump Sum Cashout)	(200)		(200)
- Retirement	(35)	35	
- Death w/ Beneficiary	(3)	3	
- Death w/o Beneficiary	\-\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	(10)	(10)
- Net change	12	28	40
3. Participants as of January 1, 2005	4,305	640	4,945
- New Entrants/Rehires	250		250
- Terminated Nonvested	(115)	-	(115)
- Terminated Vested (Lump Sum Cashout)	(140)		(140)
- Retirement	(30)	30	=1
- Death w/ Beneficiary	(2)	2	-
Death w/o Beneficiary	- .	(7)	(7)
- Net change	(37)	25	(12)
4. Participants as of January 1, 2006	4,268	665	4,933
- New Entrants/Rehires	300	-	300
- Terminated Nonvested	(130)	-	(130)
- Terminated Vested (Lump Sum Cashout)	(115)	-	(115)
- Retirement	`(35)	35	-
- Death w/ Beneficiary	(1)	1	
- Death w/o Beneficiary	- ` '	(4)	(4)
- Net change	19	32	51
5. Participants as of January 1, 2007	4,287	697	4,984

National Oll Full-Time Salaried Pension Plan Age/Svc/Earnings as of January 1, 2007

Age (Years)

		v ئ	Se 5-10	Service (Years) 10-15	15-20	>20	Totals
< 25	# Participants Average Salary	150 39,000	140 50,000	1 1	t I	1 (290 44,300
25-35	# Participants Average Salary	200 51,000	160 63,000	100 67,000	55 71,000	1 1	515 60,000
35-45	# Participants Average Salary	195 64,000	208 72,000	186 76,000	211 83.000	201 84,000	1,001 75,900
45-55	# Participants Average Salary	184	163 71,000	195 73,000	310 82,000	755 84,000	1,60.7
55-65	# Participants Average Salary	168 66,000	77 000'02		81 80,000	431 81,000	844 76,200
> 65	# Participants Average Salary	4 51,000	5 57,000	11 50,000	6 62,000	4 58,000	30 54,800
Totals	# Participants Average Salary	901 63,021	753 71,048	579 78,749	663 87,860	1,391 90.030	4,287 73,000
	Avg Age Avg Svc Avg Salary	47.0 17.3 73,000					

National Oil Full-Time Salaried Supplemental Retirement Plan (SRP)

Immediate Eligibility

Normal Retirement Age 65

Early Retirement Age 55 with 5 years of service

Accrued Benefit calculated under the provisions of the Accrued Benefit

Salaried Pension Plan without regard to tax system maximums less actual Accrued Benefit under the

Salaried Pension Plan

Normal Retirement Benefit Accrued Benefit

Accrued Benefit reduced by 0.25% per month that Early Retirement Benefit

early retirement precedes age 62

Commencement Date and Form

of Benefit

Must be same as under Salaried Pension Plan

None Indexing

Termination Benefit None

Pre-Retirement Death Benefit None

Disability Benefit None

Supplemental Retirement Plan <u>Historical Valuation Results - January 1</u>	2003	2004	2005	2006	2007
Participant Summary					
1 Active Participants					
(a) count	43	45	47	49	52
(b) average age	51.9	52.4	52 9	53.1	53.6
(c) average service	170	17.5	18 1	18 2	18.5
(d) average future working lifetime	7,5	7.0	6.5	6.3	6.1
(e) average earnings (prior year)	300,000	305,000	310,000	315,000	325,000
2. Deferred Vested Participants					!
(a) count	-		•	~	
3. Pensioners (incl beneficiaries)					
(a) count	12	. 13	14	15	17
(b) average age	68.5	68.0	67.6	67.2	66.6
(c) average annual benefit	12,000	12,500	12,900	13,100	14,000

Expense Valuation Results (numbers in \$000's) *

1. Reconciliation of funded status at valuation date:					
1. 1400010000001 Of fundod otatas at failudion date.					
(a) Accumulated Benefit Obligation	(8,451)	(9,874)	(11,489)	(13,796)	(14,396)
(b) Projected Benefit Obligation	(21,127)	(24,684)	(28,722)	(34,489)	(35,991)
(c) Fair Value of Assets				-	
(d) Funded Status: (b) + (c)	(21,127)	(24,684)	(28,722)	(34,489)	(35,991)
(e) Unrecognized prior service costs	-		-		₩.
(f) Unrecognized (gains)/losses	1,839	3,320	4,930	7,826	5,809
(g) Prepaid/(Accrued) expense	(19,289)	(21,364)	(23,792)	(26,663)	N/A
2. Pension Expense					
(a) Service cost (beg of year)	798	877	959	1,070	1,118
(b) Interest cost	1,420	1,592	1,775	1,950	2,127
(c) Expected ROA		· 		-	- 1
(d) Amort of prior svc cost	_	-		-	-
(e) Amort of unrec (gain)/loss	_	122	317	695	362
(f) Pension Expense for year	2,219	2,591	3,051	3,715	3,607
3. Benefit Payments	144	163	181	197	238
4 Actuarial Basis					:
(a) Discount rate	6.50%	6.25%	6 00%	5.50%	5 75%
(b) Return on assets	N/A	N/A	N/A	N/A	N/A
(c) Salary scale	4 00%	4.00%	3 75%	3.50%	3 50%
(d) CPI	3.50%	3.50%	3.00%	3.00%	3.00%
(e) All other assumptions	S	ame as for Full-I	time Salaried Pe	nsion Plan	

^{*} numbers may not add due to rounding

National Oil Full-Time Hourly Union Pension Plan

Eligibility

Immediate

Vesting

100% after 5 years of service

Normal Retirement Age

65

Early Retirement Age

55 with 10 years of service

Normal Retirement Benefit

\$75 per month times years of service for terminations/

retirements during 2003, 2004, and 2005

\$80 per month times years of service for terminations/

retirements during 2006 and beyond

Accrued Benefit

Benefit calculated as under the normal retirement benefit formula based on service and multiplier as of date of

calculation.

Early Retirement Benefit

Unreduced benefit at 62 with 30 years of service, otherwise reduced by 0.25% per month that early retirement precedes Normal Retirement Age.

Form of Benefit

If married, 50% joint & survivor benefit without reduction

If not married, single life annuity.

Optional Forms of Benefit

None

Post-Retirement Indexing

Lesser of 1% or CPI each year after pension commencement

Termination Benefit

Lump sum equal to actuarial present value of accrued

benefit assuming no indexing

Pre-Retirement Death Benefit

Lump sum equal to actuarial present value of accrued benefit assuming no indexing, payable to named beneficiary

Disability Benefit

None

	2003	2004	2005	2006	2007
Participant Summary - January 1					
Active Participants	· · · · · · · · · · · · · · · · · · ·				
(a) count	6,437	6,376	6 295	6.253	6.300
(b) average age	451	45 5	46 4	47.0	47.2
(c) average service	16 2	16 7	17 3	17 8	18.0
(d) average future working lifetime	11.8	11.5	10.7	10.6	10.8
(e) average plan eamings (prior year)	37 100	38,032	39,500	39,800	39,600
Deferred Vested Participants					
(a) count	••	-		-	-
Pensioners (incl beneficiaries)					
(a) count	985	1,016	1,034	1,060	1,083
(b) average age	71.0	71.5	71.2	70.8	70.2
(c) average annual benefit	9,800	9,900	10,000	10,800	11,200

Plan Assets (numbers in \$000's) *

Change in Plan Assets during Prior Year.					
Market Value of Assets at January 1 of prior year	306,848	306,653	380 717	444 899	504,972
Employer Contributions during prior year	19,000	24,000	33,000	34,400	37,000
Benefit Payments during prior year	(9,883)	(11,258)	(11,340)	(12,000)	(15,000)
Expenses during prior year		-			-
Investment return during prior year	(9,311)	61,321	42,522	37,674	30,236
Market Value of Assets at January 1 of current year	306,653	380,717	444,899	504 972	557,208
Rate of return during prior year	-3%	20%	11%	8%	6%
Average Portfolio Mix During Prior Year.	•				
(a) Domestic Large Cap Equities	21%	25%	29%	30%	10%
(b) Domestic Small Cap Equities	23%	25%	20%	21%	0%
(c) Domestic Fixed Income	47%	35%	38%	36%	.88%
(d) International Equities	2%	10%	8%	9%	0%
(e) Real Estate	2%	2%	2%	2%	0%
(f) Cash	<u>5%</u>	<u>3%</u>	<u>3%</u> -	<u>2%</u>	2%
(g) Total	100%	100%	100%	100%	100%
Asset Class Returns during Prior Year:			·		
(a) Domestic Large Cap Equities	-14%	25%	15%	13%	23%
(b) Domestic Small Cap Equities	-18%	30%	14%	7%	18%
(c) Domestic Fixed Income	9%	5%	7%	3%	4%
(d) International Equities	-16%	40%	12%	17%	10%
(e) Real Estate	4%	3%	3%	12%	8%
(f) Cash	2%	1%	1%	2%	2%

^{*} numbers may not add due to rounding

National Oil Full-Time Hourly Union Pension Plan Historical Actuarial Valuation Results

Funding Valuation - January 1 (numbers in \$000's) *		2003		2004		2005	2006		2007
Actuarial Accrued Liability: Active Multiplier	\$	75		75	\$	75 \$	80	\$	80
(a) Active participants	Ψ	250 499	Ψ	329 507	Υ	380 324	455 351	·	523 917
(b) Deferred vested participants		200 400		525 001			-		-
(c) Pensioners		91,704		100,584		105,985	119,059		133,426
(d) Total		342,202		430 091		486,309	574 410		657 342
2 Actuarial Value of Assets		306,653		380,717		444,899	504 972		557 208
3 Unfunded Actuarial Accrued Liability: (1d)-(2)		35,549		49,374		41,411	69,438		100,134
4. Normal Cost (beg Of year)		15,463		19 731		21 984	25 582		29 106
5. Change in Unfunded AAL during prior year.									
(a) Unfunded AAL at prior valuation date		6 839		35 549		49 374	41,411		69 438
(b) Adjustment for Interest		547		2,844		3,456	2,795		4,513
(c) Normal Cost w/interest less contributions		(4,694)		(8,260)		(13,043)	(12 093)		(10 958)
(d) (Gain)/Loss on investment		34,224		(36,280)		(15,114)	(6 887)		3,302
(e) (Gain)/Loss on termination		(1,500)		(16,000)		(6.000)	(5 000)		(3,000)
(f) (Gain)/Loss on salary increases less than expected		-		` - '		* *			-
(g) (Gain)/Loss on mortality		200		(1,000)		(1,200)	(1,900)		500
(h) (Gain)/Loss on retirement		(250)		(1,000)		(750)	(550)		(300)
(i) (Gain)/Loss on assumption changes		` ,		73,000		24,200	23 400		37 500
(j) (Gain)/Loss on expenses		-				-			-
(k) (Gain)/Loss on all other factors		184		521		487	(197)		(861)
(I) Change in active benefit multiplier		_		-		-	28,459		-
(m) Unfunded AAL at current valuation date		35,549		49,374		41,411	69,438		100 134
6 Actuarial Basis									
(a) Interest		8 00%		7 00%		6 75%	6 50%		6.00%
(b) Salary scale		N/A		N/A		N/A	N/A		N/A
(c) Consumer Price Index		3.50%		3 50%		3.00%	3 00%		3.00%
(d) Mortality						GAM83			
(e) Tumover			Ε	Based on NO	C ex	cperience for 19	86-1988		
(f) Retirement age		Age	62, 1	with appropr	iate e	early retirement	reduction, if a	any	
(g) Proportion married and age difference		80% m	arrie	d, male spot	ıses	3 years older th	an temale sp	ouse	S ·
(h) Expenses					expe	nses paid by co	трапу		4.00%
(i) Post-retirement indexing		1 00%		1.00%		1.00%	1 00%		1.00%
(i) Asset Valuation Method				Mai		alue of assets			
(k) Actuarial Cost Method					Uı	nit credit			

^{*} numbers may not add due to rounding

Expense Valuation - January 1 (numbers in \$000°s) *		2003		2004		2005		2006	2007
1 Reconciliation of funded status at valuation date:				-					
(active multiplier)	\$	75	\$	75	\$	75	\$	80 \$	80
(a) Accumulated Benefit Obligation		(431 107)		(487 061)		(551,307)		(677,386)	(716,405)
(b) Projected Benefit Obligation		(431,107)		(487,061)		(551,307)		(677,386)	(716 405)
(c) Fair Value of Assets		306,653		380 717		444,899		504,972	557,208
(d) Funded Status: (b) + (c)		(124,454)		(106,344)		(106.408)		(172,414)	(159,197)
(e) Unrecognized prior service costs		34,913		31,077		27,240		59,202	51,988
(f) Unrecognized (gains)/losses		66,824		49 829		59,924		98,779	89 132
(g) Prepaid/(Accrued) expense		(22,717)		(25,438)		(19 244)		(14,433)	N/A
2. Pension Expense:									
(a) Service Cost (beg. of year)		20,102		22,691		25,282		30,698	30,464
(b) Interest Cost		29,007		31,508		34,255		38 615	42,514
(c) Expected return on assets		(28,234)		(31,327)		(34,232)		(38 810)	(33,942)
(d) Amortization of prior service cost		3,837		3,837		3,837		7,214	7,214
(e) Amortization of net actuarial (gain)/loss		2.010		98		448		2,928	1,620
(f) Pension Expense		26 721		26,806		29,589		40,644	47,869
3 Actuarial Basis and Supplemental Data									
(a) Discount rate		6.50%		6 25%		6.00%		5 50%	5.75%
(b) Return on assets		9 00%		8 00%		7.50%		7 50%	6.00%
(c) Salary scale		N/A		N/A		N/A		N/A	N/A
(d) Consumer Price Index		3.50%		3 50%		3.00%		3.00%	3.00%
(e) Mortality	GAM83								
(f) Turnover						xperience for			l
(g) Retirement age	Age 62, with appropriate early retirement reduction, if any						÷		
(h) Proportion married and age difference		80% m	arrie	d, male spot	ıses	3 years older	tha	n female spouses	
(i) Expenses					expe	enses paid by	con	npany	4.000
(j) Post-retirement indexing		1 00%		1.00%		1.00%		1 00%	1.00%
(k) Asset Valuation Method						value of asset			
(I) Actuarial Cost Method					oject	ted unit credit			
(m) Employer contributions		24,000		33,000		34,400		37,000	32,000
(n) Benefit payments		(9,883)		(11,258)		. (11,340)		(12,000)	(15,000)

^{*} numbers may not add due to rounding

National Oil Full-Time Hourly Union Pension Plan Reconciliation of Plan Participants (2003 - 2007)

	Active	Pensioners/ Beneficiaries	Total	
1. Participants as of January 1, 2003	6,437	985	7,422	
- New Entrants/Rehires	200		200	
- Terminated Nonvested	(100)	-	(100)	
- Terminated Vested (Lump Sum Cashout)	(120)	-	(120)	
Retirement	(40)	40		
- Death w/ Beneficiary	(1)	1	_	
Death w/o Beneficiary	41	(10)	(10)	
- Net change	(61)	31	(30)	
2. Participants as of January 1, 2004	6,376	1,016	7,392	
- New Entrants/Rehires	120		120	
- Terminated Nonvested	(75)	-	(75)	
- Terminated Vested (Lump Sum Cashout)	(100)	→	(100)	
- Retirement	(25)	25	-	
- Death w/ Beneficiary	(1)	1	-	
- Death w/o Beneficiary	-	(8)	(8)	
- Net change	(81)	18	(63)	
3. Participants as of January 1, 2005	6,295	1,034	7,329	
- New Entrants/Rehires	150	-	150	
- Terminated Nonvested	(80)		(80)	
 Terminated Vested (Lump Sum Cashout) 	(75)		(75)	
- Retirement	(35)	35	₹,	
- Death w/ Beneficiary	(2)	2		
- Death w/o Beneficiary	- ·	(11)	(11)	
- Net change	(42)	26	(16)	
4. Participants as of January 1, 2006	6,253	1,060	7,313	
- New Entrants/Rehires	148	••	148	
- Terminated Nonvested	(30)		(30)	
- Terminated Vested (Lump Sum Cashout)	(40)	-	(40)	
Retirement	(30)	30	-	
- Death w/ Beneficiary	(1)	1		
- Death w/o Beneficiary	-	(8)	(8)	
- Net change	47	23	70	
5. Participants as of January 1, 2007	6,300	1,083	7,383	

National Oil Full-Time Hourly Union Pension Plan Age/Svc/Earnings as of January 1, 2007

Age (Years)

National Oil Part-Time DC Pension Plan

Eligibility

Immediate

Vesting

Immediate

Employee Contributions

Employee may defer between 1% to 20% of pay

Employer Contributions

3% of pay

Plan Fund Investment Options

The employer invests in funds elected by employee

Account Balance

Contributions are accumulated in member's individual account earning a rate of return based on the

investments elected by the employee

Loans/Withdrawals

Not permitted.

Benefit on Termination or

Retirement

Account balance is payable to employee upon termination or retirement. Employee has the option to leave the balance in the fund or withdraw entire balance

immediately upon termination or retirement

Benefit on Death

Account balance is payable to named beneficiary

National Oil Part-Time DC Pension Plan

Historical Results - January 1

	2003	2004	2005	2006	2007	
Participant Summary						
(a) number participating during prior year	5,900	6,200	6,300	6,250	6,500	
(b) average age	29.5	30.0	30.5	30.9	28.9	
(c) average pay	22,000	23,000	24,000	26,000	29,000	
Of a sure in Diag. Accords also in a Original Vision	<u> </u>					
Change in Plan Assets during Prior Year: Market Value of Assets at January 1 of prior year	41,300	40,503	42 861	50,608	57,560	
Employee Contributions during prior year	6.490	7,130	7,560	8,125	9,425	
Company Contributions during prior year	3,894	4,278	4,536	4,875	5,655	
Benefit Payments during prior year	(12,390)	(13,020)	(13,230)	(13,125)	(13,650	
Expenses during prior year	-	•••	· ·	<u>-</u>		
nvestment return during prior year	1,209	2.070	0.000	7 076		
micoditom retain adming prior year	1,209	3,970	8,882 50 608	7,076 57,560	4,07 63.06	

40,503

3%

10%

42,861

21%

50,608

63,069

7%

14%

57,560

Rate of return during prior year

Market Value of Assets at January 1 of current year

^{*} numbers may not add due to rounding

National Oil Full-Time Salaried and Union Retiree Health Benefit Program

Eligibility

Immediate

Earliest Retirement Age

55 and 10 years of service

Retirement benefit

Retirees and their spouses may elect to

participate in a self insured health plan, with 100% the of cost of the plan paid by the employer

Death benefit

Coverage continues for the life of the spouse after death of

an eligible employee

Benefits Covered

\$0 deductible; \$0 copay No lifetime maximum

Office visits Hospital visits

Surgery

Prescription drugs

2003 2004 2005 2006 2007

Expense Valuation Results - January 1 (numbers in \$000's) *

							
1. Reconciliation of funded status at valuation date:							
A A A A A A A A A A A A A A A A A A A							
(a) Accumulated Postretirement Benefit Obligation		(500 545)	(0.10.10.1)	/70 A A A 7\	/77E 700\		
(i) actives		(588,515)					
(ii) retirees	(281,151)	(372,071)	(438,277)	(511 869)			
(iii) total	(831,732)	(960,586)	(1,084,381)		(1,315,448)		
(b) Market Value of Assets	0	0	0	0	0		
(c) Surplus: (a) + (b)	(831,732)	(960,586)	(1,084,381)	(1,246,016)	(1,315,448)		
(d) Unrecognized prior service costs	0	0	0	0	0		
(e) Unrecognized (gain)/loss	38,128	95,630	140,417	212,937	182,584		
(f) Prepaid/(Accrued) expense		(864,956)		(1,033,078)	N/A		
(i) Tropolar(Noordod) expenses	(,,	(,	(, , , ,	, , , ,			
2. Expense							
Z. Experise							
(a) Service cost (beg. of year)	34,411	36 782	40,381	45,884	48,482		
, , , , , , , , , , , , , , , , , , ,	55,690	61,726	66,883	70,449	77,650		
(b) Interest cost	•	. 01,720	00,000	0,1,0	0		
(c) Expected ROA	0		0	0	0		
(d) Amort of prior svc cost	0	0	-	·	3,190		
(e) Amort of unrec (gain)/loss	0	0	1,950	5,453	129 321		
(f) Expense for year	90,101	98,508	109,214	121,787	129 321		
		10.555	00.400	20.000	27 000		
3. Benefit Payments	18,750	19,500	20,100	22,000	27,000		
	40.70	40.00	40.40	16 20	16 00		
4 Average Future Working Lifetime to Retirement	16 70	16.90	16 40	10 20	10 00		
		0.00	0.40	9.20	9.00		
5. Average Future Working Lifetime to FEA	9.70	9.90	9.40	9.20	9.00		
6. Actuarial Basis							
	0.500	2.050/	0.000	5 50%	5.75%		
(a) Discount rate	6.50%	6 25%	6 00%				
(b) Return on assets	N/A	N/A	N/A	N/A	N/A		
(c) Medical trend							
Initial rate	7.00%	6.50%	6 00%	5.50%			
Annual decrease	0.50%	0 50%	0.50%	0.50%			
Ultimate rate	4,50%	4.50%	4.50%	4.50%			
Year ultimate trend rate reached	2008	2008	2008	2008			
(d) CPI	3.50%	3.50%	3.00%	3.00%			
(e) Per capita claims cost	8,125	8,300	8,450	8,800	9,500		
(f) Retirement assumption	Age 62 with 10 years of service						
(g) All other demographic assumptions	Same as those used for pension plans						
(g) All billet demographic assumptions							

^{*} numbers may not add due to rounding