FALL 2011

EXAM CSP-RC

Company/Sponsor Perspective Retirement Benefits Canada

CASE STUDY

CSP-RC morning

Case Study - Course CSP Retirement - CANADA

National Oil Company - Background

National Oil Company (NOC) is a large well-established company that services oil wells all over the country of Gevrey. 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 Gevrey. Although NOC is the largest player in the industry within Gevrey, 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 Gevrey - Background

Gevrey 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 Gevrey 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 Gevrey and there are no state-provided life or health-care benefits.

For financial reporting purposes, Gevrey adopted CICA Accounting Standards, and NOC applied CICA 3461 as at January 1, 2000 with retroactive restatement at that time.

The investment market in Gevrey 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
- 3. a non-eligible pension plan (referred to as the SRP) for its executives that is supplemental to the salaried ERP. This plan has no assets.

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

Furthermore, 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

	2005	2006	2007	2008	2009	2010
Participant Summary - January 1						
Active Participants						
(a) count	4,305	4,268	4,287	4,250	4,118	4,067
(b) average age	46.1	46.6	47.0	47.5	48.0	48.5
(c) average service	16.4	16.8	17.3	17.8	18.4	18.7
(d) average future working lifetime	11.0	10.8	11.0	10.8	10.5	10.7
(e) average future working lifetime to vesting (for those not)	N/A	N/A	N/A	N/A	N/A	3.0
(f) average plan earnings (prior year)	68,000	71,000	73,000	74,000	75,000	78,000
Deferred Vested Participants						
(a) count	-	~	-	•	-	-
Pensioners (incl beneficiaries)						
(a) count	640	665	697	736	775	804
(b) average age	70.5	70.2	69.8	69.7	70.5	70.5
(c) average annual benefit	19,500	19,700	20,100	20,300	20,800	21,200

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

				 ' 		
Change in Plan Assets during Prior Year:						
Market Value of Assets at January 1 of prior year	674,049	771,730	859,388	1,003,940	1,027,990	875,898
Employer Contributions during prior year	37,000	39,338	42,134	41,645	40,564	40,526
Benefit Payments during prior year	(19,480)	(20,500)	(22,000)	(27,000)	(28,000)	(29,000)
Expenses during prior year			` '- '	-	` '- '	
Investment return during prior year	80,162	68,819	124,419	9,405	(164,656)	94,955
Market Value of Assets at January 1 of current year	771,730	859,388	1,003,940	1,027,990	875,898	982,379
Rate of return during prior year	12%	9%	14%	1%	-16%	11%
Average Portfolio Mix During Prior Year:						
(a) Domestic Large Cap Equities	30%	29%	35%	32%	25%	31%
(b) Domestic Small Cap Equities	27%	28%	22%	21%	19%	21%
(c) Domestic Fixed Income	26%	27%	30%	34%	40%	36%
(d) International Equities	13%	11%	9%	7%	9%	5%
(e) Real Estate	2%	3%	2%	3%	4%	4%
(f) Cash	<u>2%</u>	<u>2%</u>	2%	<u>3%</u>	<u>3%</u>	3%
(g) Total	100%	100%	100%	100%	100%	100%
Asset Class Returns during Prior Year:						
(a) Domestic Large Cap Equities	15%	13%	23%	-2%	-30%	15%
(b) Domestic Small Cap Equities	14%	7%	18%	-4%	-40%	20%
(c) Domestic Fixed Income	7%	3%	4%	5%	2%	4%
(d) International Equities	12%	17%	10%	5%	-20%	6%
(e) Real Estate	3%	12%	8%	10%	3%	3%
(f) Cash	1%	2%	2%	2%	2%	2%

^{*} numbers may not add due to rounding

	2005	2006	2007	2008	2009	2010
Funding Valuation - January 1 (numbers in \$000's) *						
1. Actuarial Accrued Liability:						
(a) Active participants	645,138	707,847	720,460	722,038	745,684	791,900
(b) Deferred vested participants	-	· -	· -	·-	· -	· -
(c) Pensioners	111,072	117,905	127,909	131,479	141,856	149,994
(d) Total	756,210	825,751	848,369	853,517	887,540	941,894
2. Actuarial Value of Assets	771,730	859,388	1,003,940	1,027,990	875,898	982,379
3. Unfunded Actuarial Accrued Liability: (1d)-(2)	(15,520)	(33,636)	(155,572)	(174,473)	11,642	(40,485)
4. Normal Cost (beg. Of year)	39,338	42,134	41,645	40,564	40,526	42,348
5. Change in Unfunded AAL during prior year:						
(a) Unfunded AAL at prior valuation date	19,661	(15,520)	(33,636)	(155,572)	(174,473)	11,642
(b) Adjustment for Interest	1,376	(1,048)	(2,186)	(10,501)	(12,213)	815
(c) Normal Cost w/interest less contributions	1,146	1,327	1,369	1,406	1,420	1,419
(d) (Gain)/Loss on investment	(32,365)	(16,092)	(67,904)	58,856	237,055	(33,239)
(e) (Gain)/Loss on termination	(8,100)	(11,000)	(8,000)	(13,000)	(17,000)	(15,000)
(f) (Gain)/Loss on salary increases less than expected	(7,000)	2,000	(4,000)	(7,000)	(12,000)	5,000
(g) (Gain)/Loss on mortality	(4,000)	(6,800)	1,000	1,500	1,800	1,300
(h) (Gain)/Loss on retirement	(4,700)	(7,400)	(5,000)	(7,000)	(13,000)	(12,500)
(i) (Gain)/Loss on assumption changes	19,100	21,000	(37,000)	(43,000)	· -	· -
(j) (Gain)/Loss on expenses	-	•		-	-	-
(k) (Gain)/Loss on all other factors	(639)	(104)	(214)	(161)	54	78
(I) Unfunded AAL at current valuation date	(15,520)	(33,636)	(155,572)	(174,473)	11,642	(40,485)
6. Actuarial Basis						
(a) Interest	6.75%	6.50%	6.75%	7.00%	7.00%	7.00%
(b) Salary scale	3.75%	3.50%	3.50%	3.50%	3.50%	3.50%
(c) Consumer Price Index	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
(d) Mortality			GAN	183		
(e) Turnover		Based	on NOC exper	ience for 1986-1	1988	
(f) Retirement age			Age			
(g) Proportion married and age difference	:	80% married, m		ears older than f	emale spouse	
(h) Expenses				s paid by compa		
(i) Asset Valuation Method			Market value		-	ĺ
(j) Actuarial Cost Method			Projected (unit credit		

^{*} numbers may not add due to rounding

Expense Valuation - January 1 (numbers in \$000's) *	2005	2006	2007	2008	2009	2010
Reconciliation of funded status at valuation date:						
(a) Accrued Benefit Obligation						
(i) retirees / actives - fully vested	N/A	N/A	N/A	N/A	N/A	(1,121,508)
(ii) actives - not fully vested	N/A	N/A	N/A	N/A	N/A	(84,415)
(iii) total	(861,311)	(979,111)	(1,023,263)	(1,047,175)	(1,110,336)	(1,205,922)
(b) Fair Value of Assets	771,730	859,388	1,003,940	1,027,990	875,898	982,379
(c) Funded Status: (a) + (b)	(89,581)	(119,724)	(19,323)	(19,184)	(234,437)	(223,543)
(d) Unamortized net actuarial(gain)/loss	1,950	28,400	(70,662)	(71,446)	141,037	111,010
(e) Accrued benefit asset/(liability)	(87,631)	(91,324)	(89,984)	(90,631)	(93,400)	(112,533)
2. Pension Expense:						
(a) Service Cost (beg. of year)	47,699	50,021	52,056	50,705	52,495	57,065
(b) Interest Cost	53,956	56,039	61,198	65,063	66,058	68,667
(c) Expected return on assets	(58,624)	(65, 265)	(70,963)	(72,434)	(61,751)	(69,234)
(d) Amortization of past service cost		• •		` -		` '- '
(e) Amortization of net actuarial (gain)/loss **	-	-	-	-	2,857	-
(f) Pension Expense for year	43,031	40,795	42,291	43,334	59,659	56,498
3. Actuarial Basis and Supplemental Data						
(a) Discount rate	6.00%	5.50%	5.75%	6.00%	5.75%	5.50%
(b) Return on assets	7.50%	7.50%	7.00%	7.00%	7.00%	7.00%
(c) Salary scale	3.75%	3.50%	3.75%	4.00%	4.00%	4.00%
(d) Consumer Price Index	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
(e) Mortality			GAN	√183		
(f) Turnover			d on NOC expe			
(g) Proportion married and age difference	8	0% married; m	ale spouses 3 y	ears older than	female spouses	
(h) Retirement age			Age			
(i) Expenses		Ass	ume all expense	es paid by comp	any	
(j) Asset Valuation Method			Market valu	e of assets		Į
(k) Actuarial Cost Method			Projected	unit credit		
(I) Employer contributions	39,338	42,134	41,645	40,564	40,526	42,348
(m) Benefit payments	(19,480)	(20,500)	(22,000)	(27,000)	(28,000)	(29,000)

^{*} numbers may not add due to rounding

** gains/losses exceeding 10% of the greater of the Accrued Benefit Obligation and the Fair Value of Assets are amortized over the
average future working llifetime of active participants

	Active	Pensioners/ Beneficiaries	Total
1. 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	-
- Death w/ Beneficiary	(2)	2	-
- Death w/o Beneficiary	-	(7)	(7)
- Net change	(37)	25	(12)
2. 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)	<u>.</u>	(115)
- Retirement	(35)	35	
- Death w/ Beneficiary	(1)	1	_
- Death w/o Beneficiary	- (' /	(4)	(4)
- Net change	19	32	51
3. Participants as of January 1, 2007	4,287	697	4,984
- New Entrants/Rehires	275	-	275
- Terminated Nonvested	(150)	-	(150)
- Terminated Vested (Lump Sum Cashout)	(120)		(120)
- Retirement	(40)	40	-
- Death w/ Beneficiary	(2)	2	-
- Death w/o Beneficiary	_ ` '	(3)	(3)
- Net change	(37)	39	2
4. Participants as of January 1, 2008	4,250	736	4,986
- New Entrants/Rehires	200	<u>.</u>	200
- Terminated Nonvested	(170)	-	(170)
- Terminated Vested (Lump Sum Cashout)	(120)	-	(120)
- Retirement	`(40)	40	_
- Death w/ Beneficiary	`(2)	2	_
- Death w/o Beneficiary	_ ` ′	(3)	(3)
- Net change	(132)	39	(93)
5. Participants as of January 1, 2009	4,118	775	4,893
- New Entrants/Rehires	230	-	230
- Terminated Nonvested	(100)	-	(100)
- Terminated Vested (Lump Sum Cashout)	(150)	-	(150)
- Retirement	`(30)	30	-
- Death w/ Beneficiary	`(1)	1	_
- Death w/o Beneficiary	- '	(2)	(2)
- Net change	(51)	29	(22)
6. Participants as of January 1, 2010	4,067	804	4,871

National Oil Full-Time Salaried Pension Plan Age/Svc/Earnings as of January 1, 2010

Age (Years)

		۸ ئ	Se 5-10	Service (Years) 10-15	15-20	>20	Totals
< 25	# Participants Average Salary	100 43,000	54 53,000	1 1	1 1	1 1	154 46,500
25-35	# Participants Average Salary	310 53,500	150 68,000	101 70,720	99 75,000	1 1	627 62,000
35-45	# Participants Average Salary	195 67,600	200 75,000	153 81,000	210 88,000	198 90,000	956 80,400
45-55	# Participants Average Salary	210 72,000	150 75,000	120 77,000	320 86,000	720 90,000	1,520 84,200
55-65	# Participants Average Salary	164 67,000	70 75,000	50 76,000	90 85,000	410 90,000	784 82,400
> 65	# Participants Average Salary	4 53,000	00°'09	5 52,000	10 66,000	4 62,000	26 60,000
Totals	# Participants Average Salary	983 61,400	627 71,400	429 76,500	696 85,100	1,332 89,900	4,067 78,000
	Avg Age Avg Svc Avg Salary	48.5 18.7 78,000					

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

Eligibility Immediate

Normal Retirement Age 65

Early Retirement Age 55 with 5 years of service

Salaried Pension Plan without regard to tax system maximums <u>less</u> actual Accrued Benefit under the

Salaried Pension Plan

Normal Retirement Benefit Accrued Benefit

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

early retirement precedes age 62

Commencement Date and Form

of Benefit

Must be same as under Salaried Pension Plan

Indexing None

Termination Benefit None

Pre-Retirement Death Benefit None

Disability Benefit None

<u>Historical Valuation Results - January 1</u>	2005	2006	2007	2008	2009	2010
Participant Summary						
1. Active Participants			***************************************			
(a) count	47	49	52	55	57	59
(b) average age	52.9	53.1	53.6	53.8	54.3	54.9
(c) average service	18.1	18.2	18.5	1.8.6	18.9	19.4
(d) average future working lifetime	6.5	6.3	6.1	6.0	5.9	5.7
(e) average future working lifetime to vesting (for those not)	N/A	N/A	N/A	N/A	N/A	2.0
(f) average plan earnings (prior year)	310,000	315,000	325,000	340,000	347,000	360,000
2. Deferred Vested Participants						
(a) count	•	•	-	-	•	-
3. Pensioners (incl beneficiaries)						
(a) count	14	15	17	19	21	23
(b) average age	67.6	67.2	66.6	66.1	65.7	66.1
(c) average annual benefit	12,900	13,100	14,000	14,500	15,000	15,300

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

Reconciliation of funded status at valuation date:						
(a) Accrued Benefit Obligation (i) retirees / actives - fully vested (ii) actives - not fully vested (iii) total	N/A N/A (28,722)	<i>N/A</i> <i>N/A</i> (34,489)	<i>N/A</i> <i>N/A</i> (35,991)	<i>N/A</i> <i>N/A</i> (37,098)	<i>N/A</i> <i>N/A</i> (42,475)	(35,746) (11,915) (47,662)
(b) Fair Value of Assets (c) Funded Status: (a) + (b) (d) Unamortized past service costs	(28,722)	(34,489)	(35,991)	(37,098)	(42,475)	(47,662)
(e) Unamortized net actuarial (gain)/loss (f) Accrued benefit asset/(liability)	4,930 (23,792)	7,826 (26,663)	5,809 (30,181)	3,547 (33,551)	5,750 (36,725)	7,219 (40,443)
2. Pension Expense	, , ,					
(a) Service cost (beg. of year)	959	1,070	1,118	1,162	1,272	1,419
(b) Interest cost (c) Expected ROA	1,775	1,950	2,127	2,287	2,506	2,690
(d) Amort of prior svc cost	-	-	-	-	-	-
(e) Amort of unrec (gain)/loss **	317	695	362	-	255	430
(f) Pension Expense for year	3,051	3,715	3,607	3,450	4,033	4,539
3. Benefit Payments	181	197	238	276	315	352
4. Actuarial Basis						
(a) Discount rate	6.00%	5.50%	5.75%	6.00%	5.75%	5.50%
(b) Return on assets	N/A	N/A	N/A	N/A	N/A	N/A
(c) Salary scale	3.75%	3.50%	3.50%	3.50%	3.50%	3.50%
(d) CPI	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
(e) All other assumptions		Same as	for Full-time Sa	iaried Pension F	rian	

^{*} numbers may not add due to rounding
*** gains/losses exceeding 10% of the greater of the Accrued Benefit Obligation and the Fair Value of Assets are amortized over the
average future working lifetime of active participants

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, 2007, 2008 and 2009

\$81 per month times years of service for terminations/

retirements during 2010 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

	2005	2006	2007	2008	2009	2010
Participant Summary - January 1						
Active Participants		······································			· ···································	
(a) count	6,295	6,253	6,300	6,363	6,326	6,285
(b) average age	46.4	47.0	47.2	47.8	48.6	49,4
(c) average service	17.3	17.8	18.0	18.7	19.3	19.8
(d) average future working lifetime	10.7	10.6	10.8	10.2	10.5	10.3
(e) average future working lifetime to vesting (for those not)	N/A	N/A	N/A	N/A	N/A	3.4
(f) average plan earnings (prior year)	39,500	39,800	39,600	41,000	42,000	43,000
Deferred Vested Participants						
(a) count	-	-	-	-	-	-
Pensioners (incl beneficiaries)						ŀ
(a) count	1,034	1,060	1,083	1,088	1,103	1,130
(b) average age	71.2	70.8	70.2	70.4	71.4	71.9
(c) average annual benefit	10,000	10,800	11,200	11,300	11,400	11,500

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

						
Change in Plan Assets during Prior Year:						
Market Value of Assets at January 1 of prior year	380,717	444,899	504,972	557,208	597,964	617,450
Employer Contributions during prior year	33,000	34,400	37,000	32,000	35,000	40,000
Benefit Payments during prior year	(11,340)	(12,000)	(15,000)	(16,000)	(16,000)	(17,000)
Expenses during prior year		· - ·		•		• • •
Investment return during prior year	42,522	37,674	30,236	24,756	486	30,315
Market Value of Assets at January 1 of current year	444,899	504,972	557,208	597,964	617,450	670,766
Rate of return during prior year	11%	8%	6%	4%	0%	5%
Average Portfolio Mix During Prior Year:						
(a) Domestic Large Cap Equities	29%	30%	10%	8%	6%	8%
(b) Domestic Small Cap Equities	20%	21%	0%	0%	0%	0%
(c) Domestic Fixed Income	38%	36%	88%	90%	92%	89%
(d) International Equities	8%	9%	0%	0%	0%	0%
(e) Real Estate	2%	2%	0%	0%	0%	0%
(f) Cash	3%	2%	2%	2%	<u>2%</u>	3%
(g) Total	100%	100%	100%	100%	100%	100%
Asset Class Returns during Prior Year:						
(a) Domestic Large Cap Equities	15%	13%	23%	-2%	-30%	15%
(b) Domestic Small Cap Equities	14%	7%	18%	-4%	-40%	20%
(c) Domestic Fixed Income	7%	3%	4%	5%	2%	4%
(d) International Equities	12%	17%	10%	5%	-20%	6%
(e) Real Estate	3%	12%	8%	10%	3%	3%
(f) Cash	1%	2%	2%	2%	2%	2%

^{*} numbers may not add due to rounding

Funding Valuation - January 1 (numbers in \$000's) *		2005		2006		2007		2008		2009		2010
Actuarial Accrued Liability: Active Multiplier	\$	75	¢	80	\$	80	\$	80	\$	80	\$	81
(a) Active participants	Ψ	380,324	Ψ	455,351	φ	523,917	φ	540,906	Ψ	582,597	Ą	631,117
(b) Deferred vested participants		300,324		400,001		020,917		340,900		002,091		001,111
(c) Pensioners		105,985		119,059		133,426		132,780		137,059		141,646
(d) Total		486,309		574,410		657,342		673,686		719,655		772,763
(u) Total		400,309		374,410		007,042		073,000		7 19,000		112,103
2. Actuarial Value of Assets		444,899		504,972		557,208		597,964		617,450		670,766
3. Unfunded Actuarial Accrued Liability: (1d)-(2)		41,411		69,438		100,134		75,721		102,205		101,997
4. Normal Cost (beg. Of year)		21,984		25,582		29,106		28,925		30,186		31,875
5. Change in Unfunded AAL during prior year:												
(a) Unfunded AAL at prior valuation date		49,374		41,411		69,438		100,134		75,721		102,205
(b) Adjustment for Interest		3,456		2,795		4,513		6,008		4,733		6,388
(c) Normal Cost w/interest less contributions		(13,043)		(12,093)		(10,958)		(2,107)		(5,360)		(9,177)
(d) (Gain)/Loss on investment		(15,114)		(6,887)		3,302		9,156		37,481		8,994
(e) (Gain)/Loss on termination		(6,000)		(5,000)		(3,000)		(11,000)		(10,000)		(12,500)
(f) (Gain)/Loss on salary increases less than expected								-		- '		- 1
(g) (Gain)/Loss on mortality		(1,200)		(1,900)		500		750		800		700
(h) (Gain)/Loss on retirement		(750)		(550)		(300)		(6,000)		(1,000)		(2,000)
(i) (Gain)/Loss on assumption changes		24,200		23,400		37,500		(21,000)		-		-
(j) (Gain)/Loss on expenses		· -		-		-		-		-		
(k) (Gain)/Loss on all other factors		487		(197)		(861)		(220)		(169)		(404)
(I) Change in active benefit multiplier		-		28,459		- '-		-		-		7,792
(m) Unfunded AAL at current valuation date		41,411		69,438		100,134		75,721		102,205		101,997
6. Actuarial Basis												
(a) Interest		6.75%		6.50%		6.00%		6.25%		6.25%		6.25%
(b) Salary scale		N/A		N/A		N/A		N/A		N/A		N/A
(c) Consumer Price Index		3.00%		3.00%		3.00%		3.00%		3.00%		3.00%
(d) Mortality						GAN						
(e) Turnover				Bas	ed o	n NOC exper	ienc	e for 1986-1	988			
(f) Retirement age						propriate early						
(g) Proportion married and age difference			80			spouses 3 ye				e spouses		
(h) Expenses				As	sum	e all expense	s pa	id by compa	ny			
(i) Post-retirement indexing		1.00%		1.00%		1.00%		1.00%		1.00%		1.00%
(j) Asset Valuation Method						Market valu	e of	assets				
(k) Actuarial Cost Method						Unit c	redit	t				

^{*} numbers may not add due to rounding

Expense Valuation - January 1 (numbers in \$000's) *		2005		2006		2007		2008		2009		2010
Reconciliation of funded status at valuation date:												······································
(active multiplier)	\$	75	\$	80	\$	80	\$	80	\$	80	\$	81
(a) Accrued Benefit Obligation												
(i) retirees / actives - fully vested		N/A		N/A		N/A		N/A		N/A		(811,668)
(ii) actives - not fully vested		N/A		N/A		N/A		N/A		N/A		(42,719)
(iii) total		(551,307)		(677,386)		(686,874)		(704,050)		(770,203)		(854,387)
(b) Fair Value of Assets		444,899		504,972		557,208		597,964		617,450		670,766
(c) Funded Status: (a) + (b)		(106,408)		(172,414)		(129,666)		(106,086)		(152,753)		(183,621)
(d) Unamortized past service costs		27,240		59,202		51,988		44,775		37,561		39,069
(e) Unamortized net actuarial (gain)/loss		59,924		98,779		59,600		30,683		74,944		96,355
(f) Accrued benefit asset/(liability)		(19,244)		(14,433)		(18,077)		(30,628)		(40,248)		(48,198)
2. Pension Expense:												
(a) Service Cost (beg. of year)		25,282		30,698		30,464		30,274		32,791		36,087
(b) Interest Cost		34,255		38,615		40,816		43,579		45,712		48,509
(c) Expected return on assets		(34,232)		(38,810)		(33,942)		(36,448)		(37,767)		(40,936)
(d) Amortization of prior service cost		3,837		7,214		7,214		7,214		7,214		8,061
(e) Amortization of net actuarial (gain)/loss **		448		2,928		· <u>-</u>		, <u> </u>		-		1,060
(f) Pension Expense		29,589		40,644		44,551		44,620		47,950		52,781
3. Actuarial Basis and Supplemental Data												
(a) Discount rate		6.00%		5.50%		5.75%		6.00%		5.75%		5.50%
(b) Return on assets		7.50%		7.50%		6.00%		6.00%		6.00%		6.00%
(c) Salary scale		N/A		N/A		N/A		N/A		N/A		N/A
(d) Consumer Price Index		3.00%		3.00%		3.00%		3.00%		3.00%		3,00%
(e) Mortality						GAN	1 83					
(f) Turnover				Bas	ed o	n NOC expe	rien	ce for 1986-1	988			
(g) Retirement age				Age 62, with	app	oropriate earl	y re	tirement redu	ictio	n, if any		
(h) Proportion married and age difference	80% married, male spouses 3 years older than female spouses											
(i) Expenses								aid by compa		,		
(i) Post-retirement indexing		1.00%		1.00%		1.00%	•	1.00%	•	1.00%		1.00%
(k) Asset Valuation Method						Market valu	e of	assets				
(I) Actuarial Cost Method						Projected	unit	credit				
(m) Employer contributions		34,400		37,000		32,000		35,000		40,000		40,000
(n) Benefit payments		(11,340)		(12,000)		(15,000)		(16,000)		(16,000)		(17,000)

^{*} numbers may not add due to rounding

** gains/losses exceeding 10% of the greater of the Accrued Benefit Obligation and the Fair Value of Assets are amortized over the average future working llifetime of active participants

National Oil Full-Time Hourly Union Pension Plan Reconciliation of Plan Participants (2005 - 2010)

	Active	Pensioners/ Beneficiaries	Total
1. Participants as of January 1, 2005	6,295	1,034	7,329
- New Entrants/Rehires - Terminated Nonvested	150 (80)	- -	150 (80)
Terminated Vested (Lump Sum Cashout)RetirementDeath w/ Beneficiary	(75) (35) (2)	35 2	(75) - -
Death w/o BeneficiaryNet change	- (42)	(11) 26	(11) (16)
2. Participants as of January 1, 2006	6,253	1,060	7,313
 New Entrants/Rehires Terminated Nonvested Terminated Vested (Lump Sum Cashout) Retirement Death w/ Beneficiary Death w/o Beneficiary Net change 	148 (30) (40) (30) (1) -	30 1 (8) 23	148 (30) (40) - - (8) 70
3. Participants as of January 1, 2007	6,300	1,083	7,383
 New Entrants/Rehires Terminated Nonvested Terminated Vested (Lump Sum Cashout) Retirement Death w/ Beneficiary Death w/o Beneficiary Net change 	130 (25) (30) (10) (2) - 63	- - 10 1 (6) 5	130 (25) (30) - (1) (6) 68
4. Participants as of January 1, 2008	6,363	1,088	7,451
 New Entrants/Rehires Terminated Nonvested Terminated Vested (Lump Sum Cashout) Retirement Death w/ Beneficiary Death w/o Beneficiary Net change 	75 (40) (50) (20) (2) - (37)	- - 20 1 (6) 15	75 (40) (50) - (1) (6) (22)
5. Participants as of January 1, 2009	6,326	1,103	7,429
 New Entrants/Rehires Terminated Nonvested Terminated Vested (Lump Sum Cashout) Retirement Death w/ Beneficiary Death w/o Beneficiary Net change 	110 (60) (60) (30) (1) - (41)	- - 30 1 (4) 27	110 (60) (60) - (4) (14)
6. Participants as of January 1, 2010	6,285	1,130	7,415

National Oil Full-Time Hourly Union Pension Plan Age/Svc/Earnings as of January 1, 2010

Age (Years)

Totals	330 - 28,400	- 462 - 35,100	2,045 300 42,500	2,096 300 46,800	302 1,300 300 45,000	7 52 000 26,600	136 6,285 900 43,000	
>20			441 50,000	886 50,000	802 50,000	7 25,000	2,136 49,900	
15-20	1 1	62 44,000	649 48,000	620 50,000	177 43,000	9 26,000	1,517 47,900	
Service (Years) 10-15	1 1	90 44,000	300 43,000	275 47,000	95 42,000	13 29,000	773 44,200	
5-10	100 34,000	110 34,000	365 34,000	165 34,000	66 32,000	11 25,000	817 33,700	
v 5	230 26,000	200	290 29,000	150 29,000	160 29,000	12 27,000	1,042 28,300	49.4 19.8 43,000
	# Participants Average Salary	Avg Age Avg Svc Avg Salary						
	< 25	25-35	35-45	45-55	55-65	> 65	Totals	

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.

Retirement

Benefit on Termination or 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

	2005	2006	2007	2008	2009	2010
Participant Summary						
(a) number participating during prior year	6,300	6,250	6,500	6,600	6,500	6,400
(b) average age	30.5	30.9	28.9	28.5	28.9	29.3
(c) average pay	24,000	26,000	29,000	31,000	31,620	32,300
			·			
Change in Plan Assets during Prior Year:	40.004	50.000	F7 500	00.000	00.000	05.000
Market Value of Assets at January 1 of prior year	42,861 7,560	50,608 8 125	57,560 9.425	63,069 10,230	66,220 10,277	65,632 10,336
Market Value of Assets at January 1 of prior year Employee Contributions during prior year	7,560	8,125	9,425	10,230	10,277	10,336
Market Value of Assets at January 1 of prior year			•	•	•	10,336 6,202
Market Value of Assets at January 1 of prior year Employee Contributions during prior year Company Contributions during prior year Benefit Payments during prior year Expenses during prior year	7,560 4,536	8,125 4,875	9,425 5,655	10,230 6,138	10,277 6,166	10,336 6,202
Market Value of Assets at January 1 of prior year Employee Contributions during prior year Company Contributions during prior year Benefit Payments during prior year Expenses during prior year Investment return during prior year	7,560 4,536 (13,230) - 8,882	8,125 4,875 (13,125) - 7,076	9,425 5,655 (13,650) - 4,079	10,230 6,138	10,277 6,166	10,336 6,202 (13,440) - 5,374
Market Value of Assets at January 1 of prior year Employee Contributions during prior year Company Contributions during prior year Benefit Payments during prior year Expenses during prior year	7,560 4,536 (13,230)	8,125 4,875 (13,125) -	9,425 5,655 (13,650)	10,230 6,138 (13,860)	10,277 6,166 (13,650) -	10,336 6,202 (13,440)

^{*} 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.

Pre-retirement / termination benefits None

Spousal 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

Life Insurance benefit Effective January 1, 2010: introduced \$50,000 life insurance

benefit payable upon death after retirement

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

Reconciliation of funded status at valuation date:						····
1. Reconciliation of funded status at valuation date:						
(a) Accrued Benefit Obligation						
(i) actives - fully vested	(646,104)	(734,147)	(775,708)	(816,512)	(915,361)	(724,363)
(ii) actives - not fully vested	N/A	N/A	N/A	N/A	N/A	(316,909)
(iii) retirees	(438,277)	(511,869)	(539,740)	(565,677)	(659,480)	(735,661)
(iv) total	(1,084,381)	(1,246,016)	(1,315,448)	(1,382,189)	(1,574,841)	(1,776,933)
(b) Fair Value of Assets	0	0	0	0	0	0
(c) Surplus: (a) + (b)	(1,084,381)	(1,246,016)	(1,315,448)	(1,382,189)	(1,574,841)	(1,776,933)
(d) Unrecognized prior service costs	0	0	0	0	0	20,000
(e) Unrecognized (gain)/loss	140,417	211,932	178,855	142,116	226,210	283,624
(f) Accrued benefit asset/(liability)	(943,964)	(1,034,083)	(1,136,593)	(1,240,072)	(1,348,631)	(1,473,309)
2. Expense						
(a) Service cost (beg. of year)	40,381	45,884	48,482	51,032	57,210	63,425
(b) Interest cost	66,883	70,449	77,650	85,153	92,923	100,340
(c) Expected ROA	0	0	0	0	0	0
(d) Amort of prior svc cost	0	0	0	0	0	2,682
(e) Amort of unrec (gain)/loss **	2,955	8,176	4,348	373	6,545	10,130
(f) Expense for year	110,219	124,510	130,479	136,559	156,678	176,577
3. Benefit Payments	20,100	22,000	27,000	28,000	32,000	32,000
Average Future Working Lifetime to Retirement	10.82	10.68	10.88	10.44	10.50	10.46
5. Average Future Working Lifetime to FEA	7.82	7.68	7.88	7.44	7.50	7.46
6. Average Future Working Lifetime to Fully Vested	N/A	N/A	N/A	N/A	N/A	7.46
(for those not vested)						
7. Actuarial Assumptions:						
(a) Discount rate	6.00%	5.50%	5.75%	6.00%	5.75%	5.50%
(b) Return on assets	N/A	N/A	N/A	N/A	N/A	N/A
(c) Medical trend						
Initial rate	6.00%	5.50%	6.00%	6.00%	6.00%	6.00%
Annual decrease	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
Ultimate rate	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Year ultimate trend rate reached	2008	2008	2010	2011	2012	2013
(d) CPI	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
(e) Per capita claims cost	8,450	8,800	9,500	9,900	11,000	12,000
(f) Retirement assumption				ears of service		
(g) All other demographic assumptions		Same	e as those used	d for pension pla	ans	

^{*} numbers may not add due to rounding

** gains/losses exceeding 10% of the Accrued Benefit Obligation are amortized over the
average future working llifetime of active participants