

**ACTUARIAL MEMORANDUM**  
**Federal Life Insurance Company (Mutual)**  
**Individual Flexible Premium Variable Annuity Contract**  
**Form L-8025**

**Product Description:** This contract is an individual variable deferred annuity product with flexible premiums. The contract allows the owner to direct premiums (less any applicable premium taxes) into a variety of funds including equity and fixed income portfolios in the company's variable annuity separate account. This contract does not include a fixed account with guaranteed interest or a market-value-adjusted account. The contract will be available for both non-qualified and qualified sales.

The minimum initial premium is \$5,000 for non-qualified contracts and \$2,000 qualified contracts. Generally subsequent premiums will be accepted subject to a \$500 minimum and an aggregate maximum limit of \$1,000,000. The initial premium will be allocated to the available funds per the owner's directions in the application. Subsequent premiums, if any, will be allocated in the same manner unless the owner instructs otherwise.

The minimum issue age is 20 and the maximum issue age is 75. The latest allowable maturity date is the first day of the first calendar month following the annuitant's 95<sup>th</sup> birthday. The owner, however, may select an earlier maturity date provided it does not occur during the first contract year.

Prior to the maturity date, transfers among the funds are generally allowed, but limited to 12 per contract year. There is no transfer fee associated with this contract.

At any time prior to the maturity date, the contract value associated with a fund is equal to the premiums allocated to that fund plus other amounts applied to that fund, plus or minus the investment performance of that fund, minus the amount of any surrenders removed from that fund, minus other charges, fees and premium tax deducted from that fund. The total contract value for a contract equals the sum of the contract values for all funds.

Two separate asset-based charges are assessed on the average daily assets in the variable account. These are mortality and expense risk charge and an administrative charge. As of the issue date, these charges are fixed and guaranteed for each contract. There are no annual contract maintenance fees associated with this contract.

**Surrenders:** The owner may fully surrender the contract anytime at or prior to its maturity for the full contract value. Partial surrenders are allowed provided the contract value immediately after the surrender is at least equal to the minimum required initial premium. Partial surrenders will be taken on a pro-rata basis from the applicable funds unless the owner instructs otherwise. There are no surrender charges associated with this contract.

**Deaths:** If the owner dies before the maturity date, we will pay to the beneficiary a death benefit equal to the contract value as of the date we receive due proof of death. There are no minimum guaranteed death benefit features associated with this contract.

**Annuitizations:** After the first contract year, the owner may choose to annuitize the contract. Annuity payments may be made on a fixed basis, variable basis or a combination of both.

The guaranteed minimum annuity payments paid on a fixed basis are based on the Annuity 2000 Mortality Table projected with Scale G to the year of annuitization and an interest rate of 1.50%. The initial annuity payments paid on a variable basis are based on the Annuity 2000 Mortality Table projected with Scale G to the year of annuitization and an interest rate of 5%. The calculation of the guaranteed minimum annuity payment rates do not include any provision for expenses.

The annuity options available under this contract are Life Income, Life Income with 120 monthly income payments guaranteed, and Joint & Survivor Income

**Nonforfeiture Requirements:** The contract is designed to comply with the Model Variable Annuity Regulation. Compliance with the minimum nonforfeiture value for variable contracts is demonstrated by assuming an accumulation of the net premium payments at an assumed net investment return of 7% per year. The net premium payment is 65% of the first year net consideration and 87.5% of the renewal year net considerations. The net considerations in each contract year are the gross premium payments paid less \$30 per contract year, \$10 per transfer, and \$1.25 per consideration.

Exhibit 1 provides a comparison of the projected contract value and cash surrender value, assuming a net investment return of 7%, to the minimum nonforfeiture value as described above. The contract values exceed the minimum nonforfeiture values in each of the 20 years illustrated in Exhibit 1. Thus, this contract is in compliance.

Exhibit 2 provides a month by month development of the Regulatory Minimum Nonforfeiture Value for the first 5 contract years.

Contract values provided under the variable account reflect the market value of the underlying assets. A return of principal is not guaranteed. The contract values provided under the variable account comply with the requirements of the NAIC's Variable Annuity Model Regulation. For this contract, the surrender value, the death benefit and the amount available upon annuitization are all equal to the contract value.

**Reserves:** The reserve liabilities for benefits provided under this contract will be established in accordance with actuarial procedures that recognize the variable nature of the benefits provided. Statutory reserves will be calculated in compliance with the Standard Valuation Law and are equal to those calculated under the Commissioners Annuity Reserve Valuation Method (CARVM) with guidance from Actuarial Guidelines 33 and 34. The valuation will be done using the "issue year" basis "with cash settlement options" and "without future interest guarantees". The valuation rate

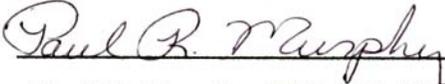
for all of the benefits in the separate account (full and partial surrender, annuitization, and death) will be based on Plan Type A. To illustrate, a contract issued in year 2007 would have a valuation rate of 5.50%. The valuation mortality basis used for contracts issued under this contract will be the Annuity 2000 Mortality Table.

The reserves established and held by the company will never be less than those calculated according to CARVM in accordance with these Actuarial Guidelines. The system used to calculate the reserves tests all possible integrated benefit streams, considering elective and non-elective benefits including cash surrender values, partial withdrawals, annuitization benefits, and death benefits. This contract does not provide any guaranteed death or living benefits. Also, this contract does not include a fixed account or guaranteed interest rates during the accumulation period.

Serial calculations are performed to ensure the effects of actual contract values, age, and where appropriate, sex are included in the reserves. We will always set reserves to be at least equal to the minimum standard for each contract.

Assets equal to the contract value will be maintained in a separate account. The portion of the assets equal to the reserves and other contract liabilities, with respect to this separate account, are not chargeable with liabilities arising out of any other business we may conduct.

**Submitted on behalf of Federal Life Insurance Company (Mutual) by:**

  
**Paul R. Murphy, FSA, MAAA**  
**August 27, 2007**

## EXHIBIT 1

### Demonstration of Compliance with the Standard Nonforfeiture Law

End of Contract Year	Premium	Contract Value	Surrender Charges	Cash Surrender Value (CSV)	Regulatory Minimum Nonforfeiture Value (MNFV)	Excess of CSV over MNFV
1	1,200.00	1,245.03	0.00	1,245.03	779.54	465.49
2	1,200.00	2,577.21	0.00	2,577.21	1,883.50	693.72
3	1,200.00	4,002.65	0.00	4,002.65	3,064.73	937.92
4	1,200.00	5,527.86	0.00	5,527.86	4,328.64	1,199.22
5	1,200.00	7,159.84	0.00	7,159.84	5,681.03	1,478.81
6	1,200.00	8,906.06	0.00	8,906.06	7,128.09	1,777.97
7	1,200.00	10,774.51	0.00	10,774.51	8,676.44	2,098.07
8	1,200.00	12,773.76	0.00	12,773.76	10,333.18	2,440.58
9	1,200.00	14,912.95	0.00	14,912.95	12,105.88	2,807.07
10	1,200.00	17,201.89	0.00	17,201.89	14,002.68	3,199.21
11	1,200.00	19,651.05	0.00	19,651.05	16,032.25	3,618.80
12	1,200.00	22,271.65	0.00	22,271.65	18,203.90	4,067.76
13	1,200.00	25,075.70	0.00	25,075.70	20,527.55	4,548.14
14	1,200.00	28,076.03	0.00	28,076.03	23,013.87	5,062.16
15	1,200.00	31,286.38	0.00	31,286.38	25,674.22	5,612.16
16	1,200.00	34,721.46	0.00	34,721.46	28,520.80	6,200.65
17	1,200.00	38,396.99	0.00	38,396.99	31,566.65	6,830.34
18	1,200.00	42,329.81	0.00	42,329.81	34,825.70	7,504.11
19	1,200.00	46,537.92	0.00	46,537.92	38,312.88	8,225.04
20	1,200.00	51,040.61	0.00	51,040.61	42,044.17	8,996.44

## EXHIBIT 2

### Development of Regulatory Minimum Nonforfeiture Value

End of Contract Month	Gross Considerations	Net Consideration	Percentage Of Net Consideration	Regulatory Minimum Nonforfeiture Value (MNFV)
1	100.00	98.75	64.19	64.55
2	100.00	98.75	64.19	129.47
3	100.00	98.75	64.19	194.75
4	100.00	98.75	64.19	260.40
5	100.00	98.75	64.19	326.42
6	100.00	98.75	64.19	392.82
7	100.00	98.75	64.19	459.59
8	100.00	98.75	64.19	526.74
9	100.00	98.75	64.19	594.27
10	100.00	98.75	64.19	662.18
11	100.00	98.75	64.19	730.47
12	100.00	68.75	44.69	779.54
13	100.00	98.75	86.41	870.85
14	100.00	98.75	86.41	962.66
15	100.00	98.75	86.41	1,055.00
16	100.00	98.75	86.41	1,147.86
17	100.00	98.75	86.41	1,241.25
18	100.00	98.75	86.41	1,335.16
19	100.00	98.75	86.41	1,429.60
20	100.00	98.75	86.41	1,524.58
21	100.00	98.75	86.41	1,620.10
22	100.00	98.75	86.41	1,716.15
23	100.00	98.75	86.41	1,812.75
24	100.00	68.75	60.16	1,883.50
25	100.00	98.75	86.41	1,981.04
26	100.00	98.75	86.41	2,079.14
27	100.00	98.75	86.41	2,177.79
28	100.00	98.75	86.41	2,277.00
29	100.00	98.75	86.41	2,376.76
30	100.00	98.75	86.41	2,477.10

**EXHIBIT 2 (Continued)**

**Development of Regulatory Minimum Nonforfeiture Value**

<b>End of Contract Month</b>	<b>Gross Considerations</b>	<b>Net Consideration</b>	<b>Percentage Of Net Consideration</b>	<b>Regulatory Minimum Nonforfeiture Value (MNFV)</b>
31	100.00	98.75	86.41	2,578.00
32	100.00	98.75	86.41	2,679.47
33	100.00	98.75	86.41	2,781.51
34	100.00	98.75	86.41	2,884.14
35	100.00	98.75	86.41	2,987.34
36	100.00	68.75	60.16	3,064.73
37	100.00	98.75	86.41	3,168.95
38	100.00	98.75	86.41	3,273.76
39	100.00	98.75	86.41	3,379.17
40	100.00	98.75	86.41	3,485.17
41	100.00	98.75	86.41	3,591.77
42	100.00	98.75	86.41	3,698.97
43	100.00	98.75	86.41	3,806.78
44	100.00	98.75	86.41	3,915.20
45	100.00	98.75	86.41	4,024.23
46	100.00	98.75	86.41	4,133.88
47	100.00	98.75	86.41	4,244.15
48	100.00	68.75	60.16	4,328.64
49	100.00	98.75	86.41	4,440.01
50	100.00	98.75	86.41	4,552.01
51	100.00	98.75	86.41	4,664.64
52	100.00	98.75	86.41	4,777.91
53	100.00	98.75	86.41	4,891.82
54	100.00	98.75	86.41	5,006.38
55	100.00	98.75	86.41	5,121.58
56	100.00	98.75	86.41	5,237.43
57	100.00	98.75	86.41	5,353.94
58	100.00	98.75	86.41	5,471.11
59	100.00	98.75	86.41	5,588.93
60	100.00	68.75	60.16	5,681.03