

**NORTHERN CALIFORNIA ELECTRICAL WORKERS PENSION PLAN**  
**as Amended and Restated**  
**Effective January 1, 2008**

This document describes pension and other benefits for Participants and Beneficiaries under the Northern California Electrical Workers Pension Plan, and is generally effective as of January 1, 2008, as a restatement of the Plan document previously effective as of January 1, 2002. Previously effective Plan documents govern the terms of this Plan before January 1, 2008, except as expressly provided otherwise in this restatement. This document reflects all changes required to be included in an individually designed, multiemployer defined benefit plan for which a determination letter is requested under Cycle D, as set forth in IRS Notice 2013-84. This document is intended to comply with ERISA and with the requirements for tax qualification under the Code and all regulations thereunder, and is to be interpreted and applied consistent with that intent. This document was approved by the Internal Revenue Service by determination letter dated October 22, 2015.

**ARTICLE I**  
**DEFINITIONS**

Where the following words and phrases appear in this Plan, they shall have the respective meanings set forth in this article, unless the context clearly indicates to the contrary. Other words and phrases with special meanings are defined where they appear unless their meaning is apparent from the context.

**“Actuarial Equivalent”** means the same actuarial value as another benefit based on the variables set forth as reflected in Appendix A (Adjustment Factors for a Joint and Survivor Annuity), Appendix B (Adjustment Factors for a Joint and Survivor Annuity for a Disability Pension), Appendix C (Adjustment Factors for a Joint and Survivor Annuity with a Pop-Up Feature), and Appendix D (Adjustment Factors for a Joint and Survivor Annuity for a Disability Pension with a Pop-Up Feature). (See Article III, section D.5, for separate actuarial equivalence rules for distributions not exceeding \$5,000.)

**“Association”** means the San Francisco Electrical Contractors Association or its successor.

**“Beneficiary”** means a person who is receiving or entitled to receive benefits under the Plan (i) as a designee by the Participant under section IV.C, (ii) pursuant to applicable provisions of the Plan in the event the Participant has failed to designate the person so entitled to benefits or (iii) pursuant to a QDRO.

**“Board”** means the board of trustees described in the Trust Agreement.

**“Break-In-Service”** means a Plan Year during which the Participant fails to earn at least five hundred (500) hours of Credited Service, provided the Participant also fails to earn at least three hundred (300) hours of aggregate Pension Credit in the combined period that includes that Plan Year and the immediately preceding Plan Year.

**“Code”** means the Internal Revenue Code of 1986, as amended, and as applied by regulations issued thereunder.

**"Collective Bargaining Agreement"** means a collective bargaining agreement in the Electrical Industry entered into between the Union and either the Association or an Employer (regardless of whether the Employer is a member of the Association) that requires an Employer to make contributions to the Plan, as such agreement may be modified, amended, extended or renewed. Such term includes the Inside Wiremen Agreement.

**"Covered Employment"** means service as an Employee, any Military Service, and any Qualified Trustee Service.

**"Credited Service"** means any hour of Covered Employment, plus any hour that falls on or after January 1, 1976, that is not Covered Employment, and that is an hour that is contiguous with Covered Employment and that is:

- (i) for which the employee is paid, or entitled to payment, for the performance of duties for the Employer;
- (ii) for which the employee is paid, or entitled to payment, by the Employer on account of a period of time during which no duties are performed (irrespective of whether the employment relationship has terminated) due to vacation, holiday, illness, incapacity (disability), jury duty or leave of absence;
- (iii) for which back pay, irrespective of mitigation of damages, is either awarded or agreed to by the Employer; and
- (iv) that would have been earned after December 31, 1985, but for the fact that the employee was absent from work with an Employer by reason of the employee's pregnancy, the birth of the employee's child, the placement of a child with the employee in connection with the child's adoption or for purposes of caring for any such child for a period beginning immediately following the child's birth or placement.

An hour is contiguous with Covered Employment if it is performed in connection with employment with the Employer that is contiguous (either before or after) with Covered Employment. No more than 501 hours of service shall be credited under clause (ii) of the preceding sentence on account of any single continuous period during which the employee performs no duties except hours of disability for which contributions to the Plan are paid or payable. An employee shall not be credited under this section for any hour for which he is directly or indirectly paid, or entitled to payment on account of a period in which no duties are performed, if such payment is made or due under a plan maintained solely for the purpose of complying with applicable Worker's Compensation, unemployment compensation or disability insurance laws, reimbursement to, or payments reimbursing, an employee for medical or medically related expenses incurred by the employee. Nor shall an employee be credited on account of a period during which no duties are performed beyond the number of straight time hours of work provided under the terms of the Collective Bargaining Agreement during the week or weeks in which Credited Service is granted pursuant to the provisions of clause (ii) of the first sentence of this definition. The number of hours credited under clauses (ii) and (iii) of the first sentence of this definition shall equal the payment divided by the employee's straight-time hourly rate of compensation in effect immediately before the period during which no duties are performed. If the Plan cannot determine the hours that should be credited to an employee during an absence, the Plan shall credit 8 hours for each work day of such absence, provided the total number of hours so credited does not exceed 501. Hours with respect to an absence shall be

credited (i) in the Plan Year in which the absence begins, if the employee would thereby be prevented from incurring a one-year Break-In-Service, or (ii) otherwise in the Plan Year immediately following. Hours with respect to an absence will not be credited unless the employee furnishes the Plan Manager with a statement from the Employer setting forth the commencement date and duration of such absence, the date the absence terminated and the reason for the absence. Such statement shall be filed with the Plan Manager within ninety (90) days after the termination of the absence for which Credited Service is requested. This definition shall be applied consistent with ERISA regulation §2530.200b which is incorporated herein by reference. No hour (or deemed hour) shall be counted more than once under this definition.

*Pre-1976 Service.* Hours of service that are earned before January 1, 1976, shall be treated as Credited Service only if earned (i) with an Employer within a job classification or employee class for which Plan contributions are required for work in such job classifications and (ii) during a contiguous period that either immediately precedes or follows (with no intervening separation from employment) Covered Service with the same Employer determined without regard to this special rule.

**"Electrical Industry"** means all branches of the Electrical Trade in the United States.

**"Employee"** means (i) an employee of an Employer who performs work under a Collective Bargaining Agreement, and (ii) an alumni employee employed by any Employer or local union signatory to this Plan or any trust established pursuant to any Collective Bargaining Agreement, who is eligible to participate pursuant to a Subscription Agreement (subject to rules adopted by the Board of Trustees, and provided that such alumni employee's participation does not violate existing law or governmental regulation nor adversely affect the Plan's tax-exempt status). An "alumni employee" is an individual employed in a non-bargaining unit position with an Employer who was previously employed for an Employer under a Collective Bargaining Agreement; provided, however, that such term shall not include any proprietor or partner of an unincorporated employer. An Employee shall exclude any leased employee of an Employer. A "leased employee" is defined in Code §414(n), and applicable regulations, and generally means any individual (other than an employee of an Employer) who, pursuant to an agreement between the recipient and any other person (a "leasing organization") has performed services for the recipient (or for the recipient and related persons determined in accordance with Code §414(n)(6)) on a substantially full-time basis for a period of at least one year, and such services are performed under the primary direction and control by the recipient.

**"Employer"** means (i) an employer that is required by a Collective Bargaining Agreement to contribute to the Trust, (ii) IBEW Local 6 with respect to its employees to the extent covered by a Subscription Agreement and (iii) any trust fund that is maintained under a Collective Bargaining Agreement with respect to its employees to the extent covered by a Subscription Agreement. For purposes of determining whether a Participant is fully vested under article VII, service with any commonly controlled entity under Code §414(b), (c), (m) and (o) shall be deemed service with an Employer.

**"ERISA"** means the Employee Retirement Income Security Act of 1974, as amended, and as applied by regulations issued thereunder.

**"Future Service"** means Covered Employment described in section B of article VI.

**“Joint and Survivor Annuity”** means a monthly annuity payable for the life of the Participant, with a monthly life annuity payable upon the Participant’s death to the Participant’s Spouse or designated Beneficiary that is equal to a percentage of the monthly amount paid to the Participant. That percentage may be 50% (which is the normal form of benefit for a married Participant who fails to elect an alternative percentage), 66-2/3%, 75% (effective January 1, 2009) or 100%. The value of a Joint and Survivor Annuity shall be the Actuarial Equivalent of a Single Life Annuity otherwise payable to the Participant.

**“Military Service”** means a period of an Employee’s absence from service as an Employee by reason of service in the uniformed services of the United States if such Employee’s cumulative period of such uniformed service does not exceed five years, the Employee returns to employment with the Employer as required under USERRA, and as otherwise subject to the requirements and exceptions set forth in USERRA. From and after December 12, 1994, hours of service will be credited monthly during the period of Military Service by averaging the hours reported on the Employee’s behalf during the 12-consecutive month period during which the highest number of hours were reported with the 24-hour period immediately preceding entry into uniformed service.

**“Normal Pension”** means a Participant’s accrued benefit payable at Normal Retirement Age, expressed as a monthly or annual payment.

**“Normal Retirement Age”** means the later of age 65 or the age of the Participant on the 5<sup>th</sup> anniversary of the date the Participant commenced participation in the Plan.

**“Participant”** means an Employee who has accrued a Normal Pension under the Plan.

**“Past Service”** means Covered Employment described in section A of article VI.

**“Pension Credit”** means a Participant’s Past Service and Future Service, and is expressed in years and fractions thereof, unless otherwise stated.

**“Permanent Break-In-Service”** generally means five consecutive one-year Breaks-In-Service, subject to the definitions and rules set forth in article VII.

**“Plan”** means this Northern California Electrical Workers Pension Plan, as it may be amended from time to time.

**“Plan Manager”** means the principal person engaged to assist the Board with the administration of the Plan in accordance with its terms.

**“Plan Year”** means the calendar year.

**“ODRO”** means a qualified domestic relations order within the meaning of Code §414(p).

**“Qualified Trustee Service”** means those hours of Covered Employment (not to exceed seven per day) under the Employee’s typical work schedule that were not performed by an hourly Employee due to service after May 7, 2012, as a trustee for the Trust. Such hours shall be treated under this definition as if they were performed.

**“Separation from Service”** means three consecutive Plan Years during which the Participant fails to retire (if eligible) or earn any Credited Service, such event to be deemed to have occurred on the last day of such period.

**"Single Life Annuity"** means a monthly annuity payable for the life of the Participant.

**"Spouse"** means the Participant's lawful spouse as recognized under the Code.

**"Subscription Agreement"** means a written agreement between the Plan and an employer to cover the employer's alumni employees, and which sets forth the terms and conditions for participation in the Plan.

**"Trust"** means the Northern California Electrical Workers Pension Trust.

**"Trust Agreement"** means the Restated Northern California Electrical Workers Pension Trust Agreement which governs the Trust, as it may be amended from time to time.

**"Trust Fund"** means money, investments and other Plan assets (subject to liabilities) held in Trust under the Trust Agreement.

**"Union"** or **"IBEW Local 6"** mean Local 6 of the International Brotherhood of Electrical Workers.

**"USERRA"** means the Uniformed Services Employment and Reemployment Rights Act of 1994, including the Heroes Earnings Assistance and Relief Act of 2008.

**"Welfare Trust"** means the San Francisco Electrical Workers Health and Welfare Trust.

## **ARTICLE II** **PARTICIPATION**

**A. Participation Before January 1, 1981.** An Employee who accrued Credited Service before January 1, 1981, became a Participant from his first date of hire in Covered Employment and continued to be a Participant until he incurred a Permanent Break-In-Service. If such Participant again became or becomes an Employee, he became or will become a Participant on the first day of service as an Employee.

**B. Participation After December 31, 1980.** An Employee first employed in Covered Employment after December 31, 1980, becomes a Participant when he first accumulates three hundred (300) hours of Pension Credit or five hundred (500) hours of Credited Service in any twelve (12) consecutive month period. Any non-vested Participant who has incurred a Permanent Break-In-Service ceases to be a Participant until he again becomes an Employee in Covered Employment and accumulates three hundred (300) hours of Pension Credit or five hundred (500) hours of Credited Service in any twelve (12) consecutive month period. A Participant who terminates employment shall recommence earning Pension Credit and Credited Service on the first day of reemployment as an Employee if any portion of his Normal Pension was nonforfeitable on the date of such reemployment. The commencement date of participation is the first day of the first Plan Year in which the Participant commenced participation in the Plan and, if applicable, the first day of the first Plan year in which the Participant re-commenced participation after any Permanent Break in Service.

**C. Termination of Participation.** A Participant who incurs a Permanent Break-In-Service resulting in the cancellation of accrued Credited Service and Pension Credit ceases to be a Participant as of the last day of the Plan Year in which such Permanent Break-In-Service occurs.

**D. Reinstatement of Participation.** An individual who ceases to be a Participant in accordance with section C may again become a Participant by meeting the requirements of section B. A Participant who incurs a Break-In-Service but not a Permanent Break-In-Service shall resume participation on the first day of his return as an Employee.

**ARTICLE III**  
**TYPES OF PENSIONS AND BENEFITS**

This Plan provides the following types of pension benefits:

- (1) Normal Pension
- (2) Early Pension
- (3) Disability Pension

These benefit types may be paid in one of several benefit forms as explained in section D, and may be increased in monthly amount under the Pension Enhancement Option explained in section D.4. Should the Participant predecease his Spouse before his pension start date, the Plan provides a Pre-Retirement Survivor Annuity for the Participant's Spouse, as explained in section A of article IV. Any pension payable to a Participant is subject to suspension should the Participant perform services in the Electrical Industry, as explained in section F.

**A. Normal Pension**

1. Eligibility for a Normal Pension. After December 31, 1975, a Participant is entitled to retire and commence his Normal Pension if he has attained Normal Retirement Age and has become vested under Article VII.

2. Amount of a Normal Pension

(a) *Calculating Benefits.* For eligible Participants retiring after December 31, 1975, the monthly Normal Pension is computed by adding the Participant's monthly Normal Pension with respect to Past Service to his monthly Normal Pension with respect to Future Service.

(b) *Past Service.* A Participant's annual Normal Pension with respect to Past Service is the amount determined by multiplying each year of Pension Credit for Past Service by \$2.50. For fractions of a year, one-twelfth of such amount is granted for each calendar month of Past Service credit. The sum of these amounts are multiplied by 1/12<sup>th</sup> to obtain the Participant's monthly Normal Pension with respect to Past Service.

(c) *Future Service.* A Participant's monthly Normal Pension with respect to Future Service is an amount equal to the product obtained by multiplying the Participant's years of Pension Credit for Future Service by the applicable pension credit factor. The applicable pension credit factor shall be the amounts set forth in the following table for the indicated periods of employment:

PERIODS OF EMPLOYMENT	APPLICABLE PENSION FACTOR
6/1/1961- 5/31/1979	\$35.00
6/1/1979- 5/31/1980	\$45.00
6/1/1980- 5/31/1982	\$50.00
6/1/1982- 5/31/1984	\$55.00
6/1/1984-12/31/1984	\$60.00
1/1/1985-12/31/1985	\$61.00
1/1/1986-12/31/1986	\$66.00
1/1/1987-12/31/1988	\$75.00
1/1/1989-12/31/1989	\$80.00
1/1/1990-12/31/1990	\$85.00
1/1/1991-12/31/1991	\$90.00
1/1/1992-12/31/1992	\$92.00
1/1/1993-12/31/1993	\$95.00
1/1/1994-12/31/1995	\$97.00
1/1/1996-12/31/1996	\$105.00
1/1/1997-12/31/1997	\$116.00
1/1/1998-12/31/1998	\$135.00
1/1/1999-12/31/2000	\$160.00
1/1/2001-12/31/2006	\$170.00
1/1/2007-12/31/2013	\$175.00
1/1/2014-Forward	\$180.00

The applicable pension credit factors will be adjusted to the amounts set forth in the following benefit comparison table depending on the date the Participant last accumulated at least 3,000 hours of Covered Employment:

INSIDE WIREMAN BENEFIT COMPARISON TABLE			
3,000 HOURS ACCUMULATED AFTER	BENEFIT LEVEL ADOPTED ON	PERIOD OF EMPLOYMENT	APPLICABLE PENSION FACTOR PER PENSION CREDIT
12/31/80	1/1/1985	After 6/1/61	\$ 37.50
12/31/82	1/1/1987	After 6/1/61	\$ 45.00
12/31/83	1/1/1988	After 6/1/61	\$ 55.00
12/31/84	1/1/1989	After 6/1/61	\$ 61.00
12/31/86	1/1/1991	After 6/1/61	\$ 90.00
12/31/87	1/1/1992	After 6/1/61	\$ 92.00
12/31/88	1/1/1993	After 6/1/61	\$ 95.00
12/31/89	1/1/1994	After 6/1/61	\$ 97.00
12/31/91	1/1/1996	After 6/1/61	\$105.00
12/31/92	1/1/1997	After 6/1/61	\$116.00
12/31/93	1/1/1998	After 6/1/61	\$135.00
12/31/95	1/1/1999	After 6/1/61	\$160.00
12/31/96	1/1/2001	After 6/1/61	\$170.00
12/31/02	1/1/2007	After 6/1/61	\$175.00
After 12/31/09	1/1/2014	After 6/1/61	\$180.00

In the event a Participant incurs a Separation from Service after December 31, 1979, the monthly benefit will be calculated using the pension factor in effect as of the date of the Separation from Service and the pension factors in the above table that are applicable after the Separation from Service shall not apply to the Participant's Pension Credit earned before the Separation from

Service. If a Participant incurs a Separation from Service, and thereafter returns to Covered Employment and earns additional Pension Credit, such additional Pension Credit shall add to the Participant's Normal Pension amount based on the above table; provided, however, that if such Participant returned to Covered Employment and earned at least 3,000 hours of Pension Credit under the Inside Wiremen Agreement between January 1, 1987 and December 31, 1991, Pension Credit earned before the Separation from Service shall be multiplied by \$90 and thereafter in accordance with the monthly Pension Benefit set forth above.

The following Table sets forth the pension factors for Participants who incurred a Separation from Service between January 1, 1980 and December 31, 1982:

PERIODS OF EMPLOYMENT	PENSION FACTOR WITH SEPARATION FROM SERVICE BEFORE 1/1/80	PENSION FACTOR WITH SEPARATION FROM SERVICE ON 12/31/1980	PENSION FACTOR WITH SEPARATION FROM SERVICE ON 12/31/1981	PENSION FACTOR WITH SEPARATION FROM SERVICE ON 12/31/1982
6/1/1961-5/31/1978	\$24.00	\$26.00	\$30.00	\$31.00
6/1/1978-5/31/1979	\$24.00	\$26.00	\$31.00	\$35.00

(d) *LTD Credit.* A Participant's Pension Credit for Future Service earned on account of contributions made on a Participant's behalf by the Welfare Trust pursuant to its Long-Term Disability (LTD) Plan shall be paid at \$6.50 per year of credit.

(e) *Pension Credit Under Nonstandard Bargaining Agreements.* Any Participant on whose behalf an Employer is contributing or has been required to contribute for work in Covered Employment at the same hourly contribution rate as is required to be contributed by Employers under the Inside Wiremen Agreement for the same hours of work and period of time the work has been or is performed, shall be entitled to the same Pension Credit as is earned for the same hours of work during the same period under the applicable Collective Bargaining Agreement providing the same contribution rate to the Plan.

(f) *Special Increases for Participants and Beneficiaries in Pay Status.* Monthly benefits payable after December 31, 1999, to Participants and Beneficiaries in pay status on that date shall be increased by 5% (rounded to the next higher multiple of fifty cents). Monthly benefits payable after December 31, 2000, to Participants and Beneficiaries in pay status on that date shall be increased by 3% (rounded to the next higher multiple of fifty cents).

(g) *Minimum Monthly Benefit.* Notwithstanding anything in this section to the contrary, the accrued monthly benefit of a Participant in pay status on the date set forth in the following table that is payable after such date shall not be less than the amount indicated in the table regardless of the form of benefit selected; provided, however, (i) that if the form of benefit is a Joint and Survivor Annuity, the monthly survivor benefit shall not be increased under this subsection to more than 50% of the table amount and (ii) the monthly benefit of a surviving Spouse or Beneficiary under a QDRO, who is in pay status on the date stated in the table, and that is payable after such date, shall not be less than 50% of the table value.



<b>If in Pay Status on this Date</b>	<b>Participant's Minimum Monthly Benefit</b>
December 31, 1999	\$500
December 31, 2000	\$600
December 31, 2003	\$700

(h) *Recognition of Accrued Benefits for Motor Shop and Neon Sign Participants.* As of the effective date of this document, no Employees were accruing benefits under either a Motor Shop Agreement or a Neon Sign Agreement. Plan Participants who have an accrued benefit with respect to service under a Motor Shop Agreement or a Neon Sign Agreement, or who are in pay status with respect to benefits accrued under either type of agreement, shall be subject to the terms of previous restatements, except to the extent the terms of this document are required by law to apply to their accrued benefit.

(i) *Maximum Benefit Accrual Under Code §415.* The maximum annual benefit that may accrue with respect to a Participant shall not exceed the amount set forth under Code §415(b) and the final Treasury regulations issued thereunder, as such statute and regulations apply to a multiemployer plan and as they may be amended from time to time. These provisions are hereby incorporated by reference. For purposes of applying the limitations under Code §415(b), the definition of “compensation” used to compute the limitation is the definition set forth in Regulation §1.415(c)-2(d)(3), which generally means wages within the meaning of Code §3401(a) plus specified items of elective deferrals.

(j) *Post-Normal Retirement Age Service.* Effective January 1, 2014, Future Service earned by a Participant during a Plan Year after Normal Retirement Age and after the Participant's pension start date, and that is not treated as Prohibited Employment, shall be recognized as Pension Credit for the purpose of calculating the Participant's monthly pension benefit as of the first day of the next following Plan Year. Any hours of Future Service not so taken into account by reason of the application of the 125 hour increment rule set forth in Section VI.B shall be carried over to the next succeeding Plan Year. Benefits described in this paragraph shall be paid in the form of pension benefit that first commenced on or after Normal Retirement Age or, if no such benefit, in the form elected by the Participant.

**B. Early Pension**

1. Eligibility for an Early Pension. A Participant may retire and commence an Early Pension if he has attained age 55, but not yet age 65, and has accumulated ten (10) or more years of Pension Credit since any Permanent Break-In-Service resulting in the cancellation of any previously accumulated Pension Credit. Such Early Pension shall be reduced for any pension amounts that may have been paid to the Participant in connection with a prior pension under the Plan paid before a return to Covered Employment, and will be reduced as provided in subsection 2(a) of this section unless the Participant qualifies for an unreduced pension otherwise described in subsection 2.

2. Amount of an Early Pension

(a) Reduced Early Pension (General Rule). Except as otherwise provided in this paragraph, a Participant's monthly Early Pension is equal to the Participant's monthly

Normal Pension, reduced by one-half of one percent (0.5%) for each month, or fraction thereof, that the Participant is younger than age 65 on the date his Early Pension is to be effective.

(b) Unreduced Early Pension (Rule of 85). If a Participant first retires after December 31, 1999, after having attained age 55, and his combined age and Pension Credit total at least 85, the Participant's monthly Early Pension is equal to the Participant's monthly Normal Pension (without reduction), provided the Participant has accumulated at least 3,000 hours of Pension Credit after December 31, 1995, of which at least 1,000 hours is earned in the three-year period that (i) immediately precedes the pension start date (for Pension Start Dates that fall before January 1, 2014) or (ii) ends on the first date that falls on or after the Participant has both (a) attained age 55 and (b) earned sufficient Pension Credit such that the Participant's combined age and Pension Credit total at least 85 (for Pension Start Dates that fall on or after January 1, 2014).

(c) Unreduced Early Pension (No Rule of 85). If a Participant's combined age and Pension Credit do not total at least 85, the Participant's monthly Early Pension is equal to the Participant's monthly Normal Pension (without reduction), provided that, as of the pension start date, either (i) the Participant has attained age 62 and earned at least 3,000 hours of Pension Credit after December 31, 1990, of which 1,000 is earned in the immediately preceding three-year period, or (ii) the Participant has attained age 64 and has accumulated at least 300, but less than 1,000, hours of Pension Credit during the immediately preceding three-year period.

(d) Reduced Early Pension (From Age 64). If a Participant first retires after May 31, 1983, with at least 300 hours of Pension Credit in the three years immediately preceding the Participant's pension start date, the Participant's monthly Early Pension is equal to the Participant's monthly Normal Pension, reduced by one-half of one percent (0.5%) for each month (if any), or fraction thereof, that the Participant is younger than age 64 on his pension start date.

(e) Reduced Early Pension (From Age 62). If a Participant first retires after May 31, 1985, with at least 3,000 hours of Pension Credit after December 31, 1980, of which 1,000 hours was earned in the three years immediately preceding the pension start date, the Participant's monthly Early Pension is equal to the Participant's monthly Normal Pension, reduced by one-half of one percent (0.5%) for each month (if any), or fraction thereof, that the Participant is younger than age 62 on his pension start date.

(f) Reduced Early Pension (From Age 60). If a Participant first retires after December 31, 1986, his combined age and Pension Credit total at least 85 and he has earned at least 3,000 hours of Pension Credit after December 31, 1982, of which at least 1,000 hours is earned in the three-year period immediately preceding the pension start date, the Participant's monthly Early Pension is equal to the Participant's monthly Normal Pension, reduced by one-half of one percent (0.5%) for each month (if any), or fraction thereof, that the Participant is younger than age 60 on his pension start date.

(g) Reduced Early Pension (From Age 59). If a Participant first retires after December 31, 1991, his combined age and Pension Credit total at least 85 and he has earned at least 3,000 hours of Pension Credit after December 31, 1987, of which at least 1,000 hours is earned in the three-year period immediately preceding the pension start date, the Participant's monthly Early Pension is equal to the Participant's monthly Normal Pension, reduced by one-

half of one percent (0.5%) for each month (if any), or fraction thereof, that the Participant is younger than age 59 on his pension start date.

(h) Reduced Early Pension (From Age 58). If a Participant first retires after December 31, 1992, his combined age and Pension Credit total at least 85 and he has earned at least 3,000 hours of Pension Credit after December 31, 1988, of which at least 1,000 hours is earned in the three-year period immediately preceding the pension start date, the Participant's monthly Early Pension is equal to the Participant's monthly Normal Pension, reduced by one-half of one percent (0.5%) for each month (if any), or fraction thereof, that the Participant is younger than age 58 on his pension start date.

(i) Reduced Early Pension (From Age 57). If a Participant first retires after December 31, 1993, his combined age and Pension Credit total at least 85 and he has earned at least 3,000 hours of Pension Credit after December 31, 1989, of which at least 1,000 hours is earned in the three-year period immediately preceding the pension start date, the Participant's monthly Early Pension is equal to the Participant's monthly Normal Pension, reduced by one-half of one percent (0.5%) for each month (if any), or fraction thereof, that the Participant is younger than age 57 on his pension start date.

(j) Reduced Early Pension (From Age 56). If a Participant first retires after December 31, 1997, his combined age and Pension Credit total at least 85 and he has earned at least 3,000 hours of Pension Credit after December 31, 1993, of which at least 1,000 hours is earned in the three-year period immediately preceding the pension start date, the Participant's monthly Early Pension is equal to the Participant's monthly Normal Pension, reduced by one-half of one percent (0.5%) for each month (if any), or fraction thereof, that the Participant is younger than age 56 on his pension start date.

(k) Other Rules. For purposes of this subsection, (i) all resulting Early Pension amounts shall be rounded to the next higher multiple of fifty cents, (ii) a "year" shall mean 12 consecutive calendar months and (iii) any reference to a Participant's age shall disregard any fractional year thereto.

3. Early Pension Credit After Return To Covered Employment. A Participant receiving an Early Pension may return to Covered Employment and resume the accrual of Pension Credit and Credited Service (subject to the suspension of benefit rules in section F). At Normal Retirement Age, a Participant's Early Pension will be recalculated and adjusted to include any Pension Credit earned after resuming Covered Employment based on the pension factors in effect at the time such Pension Credit was earned, subject to ERISA §203(a)(3) and the regulations thereunder.

### **C. Disability Pension**

1. Eligibility. A Participant may retire on a Disability Pension if he has:

- (i) become permanently and totally disabled;
- (ii) earned at least ten years of Pension Credit since any Permanent Break-In-Service;
- (iii) earned at least 300 hours of Pension Credit within the 36-month period ending immediately before his application for a Disability Pension;

- (iv) has been permanently and totally disabled for at least six months from the onset of the disability; and
- (v) not previously commenced an Early Pension.

2. Commencement and Cessation. A Disability Pension will commence with the first day of the month following or coinciding with the date the Participant's social security disability benefits commence, provided that a copy of the award is submitted to the Office of the Plan Manager no later than 60 days following the date of the award's issuance. If the award is not submitted within this 60-day period, the Disability Pension shall commence with the month that begins after notice of the social security disability award is provided to the Plan Manager. Monthly Disability Pension benefits will cease with the month succeeding the first month in which the Participant either is no longer permanently and totally disabled or performs any service in the Electrical Industry.

3. Amount. The monthly amount of a Participant's Disability Pension shall be the same as the monthly amount of the Participant's Normal Pension earned as of the date of the commencement of the Disability Pension.

4. Permanent And Total Disability Defined. An Employee shall be deemed permanently and totally disabled if, and only if, the Social Security Administration has determined that the Participant is entitled to a permanent Social Security disability benefit under his Old Age and Disability Insurance coverage.

5. Required Medical Evidence. A Participant who has not attained Normal Retirement Age will be required to provide proof periodically of continued qualification for a Disability Pension as a condition to further benefits. Should a Participant fail or refuse to supply such proof, the Board may suspend further Disability Pension payments until such proof is supplied.

6. Earning Pension Credit Upon Return. A Participant who ceases to be paid a Disability Pension and returns to Covered Employment may resume earning Pension Credit. Pension Credit earned before returning to Covered Employment shall be calculated using the pension factors in effect at the time his Disability Pension commenced, and Pension Credit earned after return to Covered Employment shall be calculated using the pension factors in effect at the time such Pension Credit was earned.

7. Notice to Board. If a Participant receiving a Disability Pension ceases to be permanently and totally disabled, or returns to employment in the Electrical Industry, the Participant shall so notify the Board, in writing, within 15 days. If such written notice is not provided, the Participant shall repay to the Plan any Disability Pension benefit he received for any month in which he at any time was either no longer disabled or employed in the Electrical Industry. If he fails to repay such amounts upon demand, the Trust may recover such amounts by legal action or deduction from any benefits to which the Participant or his Beneficiary may later be entitled, and he shall again be entitled to Disability Pension benefits, if at all, no earlier than six months after having performed services in the Electrical Industry.

#### **D. Features and Forms of Benefit**

1. General Rule. Subject to the waiver and consent rules in section E, a Participant may elect to have his Normal Pension, Early Pension or Disability Pension paid in the form of

either a Joint and Survivor Annuity or a Single Life Annuity. A Participant who has made no election at the latest time his pension may commence will be paid in the form of a Joint and 50% Survivor Annuity if he is continuously married during the one-year period ending on his pension start date, or otherwise in the form of a Single Life Annuity.

2. Joint and Survivor Annuity. A Participant who elects a Joint and Survivor form of benefit may select as the survivor annuitant his Spouse or, subject to his Spouse's consent, any other Beneficiary who has been designated for at least one year. The amount of the monthly benefit payable to the Participant's survivor annuitant should the Participant predecease the survivor annuitant shall be 50%, 66-2/3%, 75% or 100% of the amount of the monthly benefit paid to the Participant, as elected by the Participant.

3. Optional Pop-Up Feature

A Participant who elects a Joint and Survivor Annuity with his Spouse as the survivor annuitant may elect a "Pop-Up" feature. A Pop-Up feature means that, should the Spouse predecease the Participant, the Participant's benefit shall be adjusted prospectively to the level of benefits that would have been paid under a Single Life Annuity had the Participant not elected a Joint and Survivor Annuity. (A limited Pop-Up feature was available for pensions that began before January 1, 1998, where the Spouse predeceased the Participant within 5 years of the pension start date.) Upon election of the Pop-Up feature, the Participant's monthly benefit shall be reduced as provided in Appendix C or, in the event of a Disability Pension, Appendix D.

4. Pension Enhancement Option

(a) *General Rule.* A living Participant who has an account in the San Francisco Electrical Workers Retirement Savings Plan (the "RS Plan") may make a once-per-lifetime, single sum direct transfer of any amount that is at least \$10,000 from the Participant's account in the RS Plan (excluding, effective April 19, 2012, any portion of such account derived from rollover contributions into the account, and earnings thereon) into the Plan to enhance the Participant's monthly benefit under his Normal Pension or Early Pension. The enhancement shall be paid in the same form as the Participant's unenhanced benefit, and the Plan provisions generally shall apply to the benefit attributable to the enhancement, except that any lump sum death benefit paid with respect to the transfer shall be the principal amount of the transfer less the sum of enhanced benefits previously paid to the Participant. From the date of the rollover to the Plan, the rollover amount will be increased by daily interest at 120% of the applicable mid-term rate under Code §1274 until the pension start date with respect to the rollover. If the Participant dies after the rollover and before the pension start date, the benefit payable with respect to the rollover shall be the Actuarial Equivalent of the rollover (as adjusted for interest), and shall be payable in the form of either a single sum distribution or, to the extent otherwise allowable under the Plan, a Joint and Survivor Annuity.

(b) *Election Procedures.* A completed application for a transfer under this subsection must be received by the Plan within ninety (90) days before the Participant's pension start date. The election shall be irrevocable upon receipt of the first benefit payment reflecting the enhancement, and the election shall be automatically revoked should the Participant die before receipt of such payment.

(c) *Amount of Enhanced Benefit.* The amount of the monthly enhancement shall be the Actuarial Equivalent of the amount transferred expressed in the benefit form elected by the

Participant; provided, however, that the interest rate shall be the greater of (i) the rate in effect for the Plan's funding purposes and (ii) the rate provided under Code §417(e)(3), in either case determined on the date of the transfer. Monthly enhanced benefit determinations at the time application for enhanced benefits is submitted shall not be changed, regardless of any subsequent change in regular defined benefits or any subsequent change in conversion tables established by the Board. Current conversion tables are set forth in Appendix G.

5. Mandatory Lump Sum Distribution. Notwithstanding any other provision of the Plan, a Participant's or Beneficiary's accrued benefit that becomes payable, and that is the actuarial equivalent of no more than \$5,000, shall be paid in a lump sum. Actuarial equivalence under this subsection shall be based on the applicable mortality table and the applicable interest rate. The "applicable mortality table" is the mortality table specified in Code §417(e)(3). The "applicable interest rate" is the adjusted first, second and third segment rates applied under rules similar to the rules of Code §430(h)(2)(C) for the month immediately preceding the month in which falls the pension start date. The adjusted first, second and third segment rates are determined without regard to the 24-month averaging provided under §430(h)(2)(D)(i), and the transition rules under Code §417(e)(3)(D)(iii) shall be applied.

#### **E. Election Procedures**

1. General Procedures (After 2010). After December 31, 2010, no pension shall commence until all required documents have been submitted to the office of the Plan Manager, including a completed pension application. Within 15 days of receiving a request by a Participant to commence a pension, the Plan Manager will provide the Participant a description of the material features, and an explanation of the relative values of, the optional forms of benefit available under the Plan in a manner that satisfies the notice requirements of Code §417(a)(3) and Treasury Regulation §1.417(a)(3)-1 ("Explanation of Benefits"). The Participant must elect any allowable form of benefit, and his Spouse (if any) must consent to such election, during the 180-day period that begins on the date that the Explanation of Benefits is transmitted. The Participant and his Spouse shall have the full 180-day period to consider any form of benefit election and consent, and submit required forms; provided, however, that no pension shall commence pursuant to a completed application that provides insufficient time for the Plan Manager to issue the first payment under the elected form of benefit before the close of the 180-day period. The Participant and Spouse may revoke any election or consent to an election under this section up to, but not on or after, the date of the first payment (regardless of the pension start date). No pension payment will be made during the 30-day period that commences on the date that the Explanation of Benefits is provided unless the Participant and Spouse (i) retain a right to revoke their benefit election or consent to the election during the 7-day period beginning on the date that the Explanation of Benefits was provided and (ii) waive any right to revoke their benefit election and consent to the election after such 7-day period but otherwise during the 30-day period beginning on the date the Explanation of Benefits was provided.

*Previously Effective Provision.* Before January 1, 2011, this Section provided in its entirety that the Plan Manager will process no application for a pension until all required documents have been submitted to the office of the Plan Manager together with a completed pension application form. Promptly upon receiving a completed application for benefits, the Plan Manager will provide the Participant a description of the material features, and an explanation of the relative values of, the optional forms of benefit available

under the Plan in a manner that satisfies the notice requirements of Code §417(a)(3) and Treasury Regulation §1.417(a)(3)-1. The Participant must elect any allowable form of benefit, and his Spouse (if any) must consent to such election, during the 180-day period that ends on his pension start date. The Participant and his Spouse shall have no less than 30 days to consider any form of benefit election, and Spousal consent to that election, except that the Participant and his Spouse may each waive this 30-day period so long as they may revoke any form of benefit election or consent to an election for no fewer than 7 days before the pension start date. The Participant and Spouse may revoke any election or consent to an election under this section up to, but not on or after, the Participant's pension start date.

2. Waiver of Normal Form of Benefit. Any form of benefit elected by a Participant who has been married to his Spouse for at least one year, and that is not in the form of a Joint and 50% Survivor Annuity, requires an express written waiver by the Participant of the Joint and 50% Survivor Annuity and a consent by his Spouse to that waiver within the 180-day period before the pension start date. The waiver and consent shall be in the form and manner required by the Board. The Spouse's execution of the consent form must be witnessed by an authorized Plan representative or a notary public. A consent by the Participant's Spouse will not be required if it is established to the satisfaction of the Board that the consent cannot be obtained because the Spouse cannot be located or because of other extraordinary circumstances allowable under ERISA. The Participant may revoke any prior waiver up to the pension start date.

3. Participants Married Less Than One Year. After December 31, 2012, no pre-retirement survivor annuity shall be paid under article IV, section A, to a Spouse unless such individual has held such status as a Spouse continuously for at least one year. No survivor benefits shall be paid to a joint annuitant under a previously-elected Joint and Survivor Annuity unless, as of the date of the Participant's death, the joint annuitant was continuously married to the Participant (in the case of a Spouse), or was continuously designated by the Participant (in the case of a nonspouse Beneficiary), for at least one year. The Pop-Up feature provided under section D.3 shall be available to a Participant regardless of the duration of the Participant's marriage as of the time of the Spouse's death.

*Previously Effective Provision.* Before January 1, 2013, this section provided in its entirety that a Participant who has been married less than one year as of his pension start will be treated as an unmarried Participant. After the passing of one year from the date of marriage, if the Participant and Spouse are still alive and married, the monthly pension will be paid retroactively to the pension start date in the form of a Joint and 50% Survivor Annuity unless the Participant and his Spouse elect an optional form of benefit as required under this section within the 30-day period following the first anniversary of their marriage. The prior sentence shall apply regardless of whether the survivor annuitant under an Joint and Survivor Annuity is the Participant's Spouse. Deduction will be taken for any overpayment attributable to the temporary Single Life Annuity and the reduced amount that would have been paid under a Joint and 50% Survivor Annuity between the pension start date and the date the Joint and 50% Survivor Annuity becomes payable. Such deduction shall be made as necessary from the monthly payments made immediately after the Joint and 50% Survivor Annuity becomes payable.

**F. Suspension of Benefits**

1. General Rule. The monthly payments of a Participant in pay status shall be suspended as provided under this section for any month in which the Participant works in Prohibited Employment. The monthly payments of a Participant collecting an Early Retirement Pension who fails to give written notice to the Plan Manager of Prohibited Employment in accordance with subsection 4(b) shall also be suspended for the 3 months immediately following the period of Prohibited Employment.

2. Benefit Payments Following Suspension

(a) *Timing.* Benefits suspended under subsection 1 shall resume for months after the last month for which benefits were suspended with the first payment beginning no later than the third month after the last calendar month of the suspension (along with payment for the two preceding months, if applicable), provided the Participant has complied with the notice requirements of subsection 4(f).

(b) *Amount.* For a Participant who has not attained Normal Retirement Age, the amount payable upon resumption shall be determined under article VII and subject to section B.3. For a Participant who has attained Normal Retirement Age, the amount payable upon resumption shall be determined as if for the first time, (i) on the basis of the Participant's Normal Retirement Age, reduced by the value of benefits received during his earlier retirement and adjusted for the applicable benefit form of benefit, and (ii) without regard to any benefit that otherwise would have accrued after the Participant's return to Covered Employment with respect to a 12-month period during which the Participant worked less than 1,000 hours. If suspended benefits that would have been paid before Normal Retirement Age reduce the value of the Participant's pension below the Actuarial Equivalent of his pension at Normal Retirement Age, the monthly amount of the resumed pension will be adjusted so as not to deprive the Participant of the value of his pension at Normal Retirement Age. A Plan amendment first effective after the Participant's initial pension start date that increases monthly benefits payable with respect to Pension Credit earned before a Participant's initial pension start date shall not apply to the Participant's benefit except as expressly provided by the Plan.

(c) *Recoupment of Overpayments.* Overpayments attributable to payments made for any month(s) for which the Participant worked in Prohibited Employment shall be deducted from pension payments that would otherwise resume. Such deduction after the Participant has attained Normal Retirement Age shall not exceed 25% of the payment, except that up to 100% of the first pension payment may be withheld upon again becoming eligible for payments after a suspension. If a Pensioner dies before recoupment of overpayments has been completed, deductions shall be made from the benefits payable to his surviving Spouse or any Beneficiary, subject to the 25% limitation.

3. Definition of Prohibited Employment

(a) *Before Normal Retirement Age.* Subject to subsection (c), and before attaining Normal Retirement Age, "Prohibited Employment" with respect to a Participant means the performance of services in any capacity in the Electrical Industry.



(b) *After Normal Retirement Age.* Subject to subsection (c), and after attaining Normal Retirement Age, “Prohibited Employment” with respect to a Participant and a calendar month, means the performance of services of 40 hours or more during the month:

(1) in the ten San Francisco Bay Area counties of San Francisco, Alameda, San Mateo, Contra Costa, Marin, Solano, Napa, Santa Clara, Sonoma and San Benito;

(2) in work of the type performed by Employees covered by the Plan on date the Participant’s pension commenced (or would have commenced but for this provision); and

(3) requiring directly or indirectly the use of the same skills employed by Employees on the date the Participant’s pension commenced (or would have commenced), including any supervision of employees in the same trade or craft or directly or indirectly using the same skills as Employees covered by the Plan on the date the Participant’s pension commenced (or would have commenced). When determining the extent to which a Participant worked during a period, "hours" means all hours for which compensation was received by the Participant whether for actual work, illness, incapacity (including disability), layoff, Military Service or leave of absence.

(c) *Exceptions.* Notwithstanding paragraphs (a) and (b), “Prohibited Employment” shall not include work (i) as a private or public building or electrical inspector, (ii) as an instructor in a Taft-Hartley Trust apprentice and training program, (iii) in sales of electrical equipment or products, (iv) in the manufacturing or marketing of electrical or electronic products and systems which does not substitute for on-site fabrication protected or sought to be protected under a Collective Bargaining Agreement, or (v) effective January 1, 2013, that is Qualified Trustee Service.

#### 4. Notice and Procedural Rules

(a) *Plan Must Notify.* The Board shall notify the Participant of the suspension rules contained in this section upon (i) making application for an Early Pension, (ii) attaining Normal Retirement Age and (iii) resuming benefit payments after having been suspended if there has been any material change in the suspension rules or the identity of the industries or area covered by the Plan. In addition, the Board shall notify all retirees at least once every 12 months of the reemployment notification requirements and presumption set forth in paragraph (b).

(b) *Participant Must Notify of Possible Prohibited Employment.* The Participant shall notify the Plan Manager in writing within 15 days after starting any work that is or may be prohibited under subsection 3(a) or (b) without regard to the number of hours of such work. If a Participant has worked in Prohibited Employment in any month after Normal Retirement Age and has not given timely notice of such employment, the Board shall apply a rebuttable presumption that he was employed at least 40 hours in any such month and any subsequent month.

#### (c) *Determining Status*

(1) Optional Advance Determination of Status. At any time, a Participant may request that the Trustees make a determination as to whether proposed service constitutes Prohibited Employment. The participant must submit proof of an actual work offer and a detailed work description from the prospective service recipient, including the number of hours

per month, the geographic location(s), and whether the work will require the use of skills acquired as an inside wireman or motor shopman.

(2) Required Advance Determination for Exceptions. To claim an exception from Prohibited Employment under subsection 3(c), the Participant must file with the office of the Plan Manager (i) proof of actual excepted work and (ii) a detailed description from the service recipient of the work to be performed including the number of hours per month, geographic location(s) and whether the work will require the use of skills acquired as an inside wireman. The Plan Manager may require periodic proof that the exception under subsection 3(c) continues to apply. Failure of a Participant to supply the Plan Manager with sufficient facts on which the Plan Manager can verify continuing excepted work shall, upon written notice to the Participant, result in benefit suspension (subject to appeal).

(d) *Participant to Obtain Employer Information.* The Plan Manager may require a Participant to obtain information from an employer, contractor, subcontractor, union or government agency, or any other person or entity relating to any post-retirement employment.

(e) *Notice Required if Benefits Suspended.* The Plan shall notify a Participant of any benefit suspension by personal delivery or first class mail during the first month in which his benefits are suspended. Such notice will include a description of the specific reasons for the suspension, copy of the relevant Plan provisions, reference to the applicable regulation of the U.S. Department of Labor and statement of the procedure for securing a review of the suspension. If the Plan intends to recoup prior overpayments subsection 2(c), the notice will explain the offset procedure, and identify the amount expected to be recovered and the periods to which they relate. Also, the notice will describe the procedure for the Participant to notify the Plan when Prohibited Employment ends.

(f) *Participant Must Notify When Prohibited Employment Ends.* A Participant whose pension has been suspended shall notify the Plan Manager when Prohibited Employment ends. Benefit payments may be withheld until such notice is provided.

(g) *Review of Adverse Determinations.* A Participant is entitled to a review of any adverse determination under this paragraph by written request filed with the Board within 90 days of the date of the determination.

(h) *Presumption of Prohibited Employment.* If the Board learns that a Participant may be working in Prohibited Employment and has not complied with the Plan's notice rules under paragraph (b), the Board may apply a rebuttable presumption that the Participant worked in Prohibited Employment for as many months as it is reasonable to so presume. If the presumed Prohibited Employment took place at a construction site, the Board may also presume, to the extent reasonable, that the duration of the Prohibited Employment is the same as the length of time that the employer has performed work at that site. The Participant may overcome the presumptions of this paragraph by establishing that his work was not Prohibited Employment.

**G. Special Rules if Plan Underfunded.** Effective January 1, 2008, should the Plan become underfunded as provided in Code §432, a Participant's accrued benefit may be reduced in the event accrued benefits are required to be reduced in accordance with that section.

**ARTICLE IV**  
**DEATH BENEFITS**

**A. Pre-Retirement Survivor Annuity.** If a Participant dies on or after the earliest age he could retire under the Plan, but before his pension start date, the Participant's surviving Spouse will receive the same benefit that would have been payable if the Participant had retired and commenced a Joint and 50% Survivor Annuity on the day before his death. If a Participant dies before the earliest age he could retire under the Plan, the Participant's surviving Spouse will receive the same benefit that would be payable if the Participant had (i) ceased to be an Employee on the date of his death, (ii) survived to the earliest retirement age under the Plan, (iii) retired and commenced Joint and 50% Survivor Annuity at the earliest retirement date, and (iv) died on the next day. A surviving Spouse will commence payments under this section on the earliest retirement date unless the Spouse elects a later date. A pre-retirement survivor annuity is available under this section only to a Participant who had at least one hour of service (or paid leave) after August 22, 1984, and only if the Participant has been lawfully married to his Spouse for continuously during the one-year ending on his death. No charge for the actuarial cost of the pre-retirement survivor annuity shall be imposed on the Participant's accrued benefit under the Plan.

**B. Single Sum Death Benefit**

1. Eligibility. Upon a Participant's death, (i) a mandatory single sum death benefit will be paid to the Participant's Beneficiary if the Actuarial Equivalent of the Beneficiary's survivor benefit is no greater than \$5,000, and (ii) an optional single sum death benefit may be paid to the Beneficiary if:

- (a) the Participant is receiving a Normal Pension, Early Pension or Disability Pension; or
- (b) the Participant had earned 4,000 hours of Pension Credit since any Permanent Break-In-Service

2. Amount. The amount of the optional single sum death benefit under this article is equal to the amount of contributions paid or payable on the Participant's behalf since any Permanent Break-In-Service, reduced by (but not below zero) any benefits paid or payable with respect to the Participant (including with respect to a QDRO) under the Plan.

3. Timing and Availability. No single sum death benefit will be paid until all pension obligations with respect to the Participant or survivor annuitant are met; provided, however, that an immediate pre-retirement single sum death benefit may be paid to the surviving Spouse if (i) no QDRO is outstanding with respect to the Participant and (ii) the surviving Spouse elects to receive the single sum death benefit. A single sum death benefit paid to the surviving spouse shall reduce or eliminate the pre-retirement survivor annuity using the factors set forth in Appendix E and F.

**C. Designation of Beneficiary.** A Participant may designate a Beneficiary by executing a form provided by the Board, and such designation shall be effective if received by the Plan Manager before the Participant's death. No benefit shall be paid to or for a Beneficiary who predeceases the Participant. Any designation of a Spouse as a Beneficiary shall automatically become ineffective upon the Participant's divorce from such Spouse, unless the

designation expressly provides that it shall remain effective notwithstanding such divorce. Any designation of a registered domestic partner (as defined in California Family Code §297) as a Beneficiary shall automatically become ineffective upon the dissolution of the domestic partnership, unless the designation expressly provides that it shall remain effective notwithstanding such dissolution. If no Beneficiary has been designated and there is no surviving Spouse upon the Participant's death, payment will be made to the Participant's registered domestic partner or, if there is no registered domestic partner, to his surviving children in equal shares or, if there are no surviving children, to his surviving parents in equal shares or, if none of the preceding, to his estate. No non-Spouse Beneficiary may be designated unless the Spouse consents to such designation as otherwise provided under the Plan.

**D. Military Service.** All death benefits under the Plan shall comply with USERRA, including the Heroes Earnings Assistance and Relief Act of 2008, and Plan provisions shall be modified as necessary to so comply.

## **ARTICLE V**

### **ROLLOVER DISTRIBUTIONS**

**A. General Rule.** A Participant or Beneficiary may elect to have any portion of an eligible rollover distribution paid directly to an eligible retirement plan he specifies in a direct rollover.

**B. Eligible Rollover Distribution.** An "eligible rollover distribution" is any distribution to the distributee other than a distribution (i) that is one of a series of substantially equal periodic payments (not less frequently than annually) made for the life (or life expectancy) of the distributee or the joint lives (or joint life expectancies) of the distributee and the distributee's Beneficiary, (ii) that is for a specified period of ten years or more, (iii) to the extent such distribution is a required minimum distribution under Code §401(a)(9), (iv) that is nontaxable unless such distribution is made to an individual retirement account or annuity or a tax-qualified plan under Code §401(a), §403(a) or, after December 31, 2006, §403(b) that agrees to account separately for the amount transferred (including the portion of any after-tax amounts), or (v) that is a hardship distribution.

**C. Eligible Retirement Plan.** An eligible retirement plan is an individual retirement account described in Code §408(a) (including a Roth-IRA described in Code §408A(b)), an individual retirement annuity described in Code §408(b), a qualified plan described in Code §401(a), an annuity plan described in Code §403(a), an annuity contract described in Code §403(b) or an eligible deferred compensation plan described in Code §457(b) that is maintained by a state or political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state and that agrees to account separately for amounts transferred into such plan from this Plan. A distributee includes an Employee, former Employee, surviving Spouse and the Employee's or former Employee's Spouse or former Spouse who is the alternate payee under a QDRO. A distributee shall also include a non-Spouse Beneficiary for direct transfers to an individual retirement account described in Code §408(a) or (b) established for the Beneficiary as an inherited IRA under Code §402(c)(11).

**ARTICLE VI**  
**PENSION CREDIT**

**A. Past Service**

1. Employment Taken Into Account. A Participant shall earn Pension Credit for Past Service for each year, or portion thereof, he was (i) in Covered Employment under a Collective Bargaining Agreement on and after June 1, 1940, and before June 1, 1961, or (ii) employed by the Union or any trust established by a Collective Bargaining Agreement subject to regulations of the Board, but in no event in excess of the period permitted Employees nor contrary to any applicable law or regulation. No Pension Credit for Past Service will be recognized for any period of time for which the Participant receives or is eligible to receive pension benefits under the terms of any other pension plan, nor shall duplicate credit be recognized under this Plan. Pension Credit for Past Service is subject to the Break-In-Service provisions of the Plan.

2. Maximum Credit. The maximum Pension Credit for Past Service shall be one-twelfth of one year of Pension Credit for each calendar month of Past Service; provided, however, the aggregate amount of Pension Credit for Past Service that may be granted any Participant in the Plan shall not exceed fifteen (15) years, all of which must have been accrued since June 1, 1940 under the Inside Wiremen Agreement.

3. Consideration of Evidence of Past Service Credit. The Board may, but need not, accept as prima facie evidence of eligibility to Pension Credit for Past Service:

- (i) a written statement by an Employer that the individual was employed by the Employer under a Collective Bargaining Agreement and the period of such employment;
- (ii) the Union's dispatch records, verified and signed by the Business Manager/Financial Secretary of the Union, for the period credit is claimed;
- (iii) a Form W-2 or check stub showing that the individual was employed by an Employer under a Collective Bargaining Agreement, together with other substantiating evidence;
- (iv) a statement by the Social Security Administration that the individual was employed by an Employer in the Electrical Industry who was a party to a Collective Bargaining Agreement; or
- (v) any records of the administrator of any plan established pursuant to a Collective Bargaining Agreement that set forth contributions to such plan for periods of employment claimed.

Although the Board may accept any form it deems appropriate to establish the validity of any claim of Past Service, the Board has sole discretion to determine the type of records it deems satisfactory and may reject, in its sole discretion, any proffered documentation and may seek or demand other forms of verification of employment entitling the individual to Pension Credit for Past Service. The amount of Pension Credit for Past Service which will be credited to any Participant will be determined by the Board on the basis of available evidence and the Participant shall be notified of the determination made and pursuant to rules and regulations to be adopted by the Board, and Participant shall be allowed a reasonable period, not to exceed sixty (60) days

after notice of such determination, to submit additional evidence. The determination of the Board with respect to the allowance of Pension Credit for Past Service shall be final and conclusive for all purposes of the Plan.

**B. Future Service.** A Participant is credited with one year of Future Service Pension Credit for each 1,500 hours of (i) Covered Employment earned on and after June 1, 1961, and (ii) deemed service for which Employer contributions are made with respect to the Participant by the Welfare Trust pursuant to its Long-Term Disability (LTD) Plan. A fractional year of Pension Credit for Future Service shall be recognized in 125 hour increments. The Plan imposes no maximum number of hours of Future Service that may be earned in a Plan Year.

**C. Reciprocal Credits.** Under the Trust Agreement, the Board may enter into reciprocal credit arrangements (including, as of the effective date of this restatement, the Electrical Industry Pension Reciprocal Agreement or "EIPRA") with the sponsors of other qualified plans upon terms mutually agreeable, actuarially sound and lawful, provided the terms of any reciprocal credit arrangements are prudent and inure to the benefit of Participants. Under the EIPRA, contributions to another pension fund may be transferred to the Plan in an aggregate amount that does not exceed the hourly contribution limit then effective under the Collective Bargaining Agreement. Such "reciprocal contributions" are treated as Covered Employment on an hourly equivalent basis for the Participant with respect to whom the contributions relate. Any excess amounts that are not transferred to the Plan because of the hourly contribution limit are allocated to the Participant's individual account in the San Francisco Electrical Workers Retirement Savings Plan. Other reciprocal credit arrangements may provide for other benefit and contribution crediting procedures.

## **ARTICLE VII**

### **VESTING AND BREAKS-IN-SERVICE**

**A. Vesting of Participants.** A Participant shall become fully vested in his pension benefit when he either (i) has earned at least one hour of Credited Service after December 31, 1975, and has accrued ten or more years of Credited Service or Pension Credit since any prior Permanent Break-In-Service, (ii) has earned at least one hour of Credited Service after December 31, 1997, (or December 31, 1988, for a Participant whose benefit was not subject to a Collective Bargaining Agreement) and has accrued five or more years of Credited Service or Pension Credit since any prior Permanent Break-In-Service or (iii) has attained Normal Retirement Age before incurring a Permanent Break-in-Service. One year of Credited Service shall be awarded for each Plan Year in which the Participant has earned at least 1,000 hours of Credited Service. Different vesting rules were in effect before January 1, 1976, which are contained in prior Plan documents. Subject only to the specific provisions of the Plan, nothing shall divest a Participant of his vested benefits under the Plan.

**B. Effect of Break-In-Service After 1975 and Before 1987.** After December 31, 1975, and before January 1, 1987, if a Participant who has not vested under Section A incurs a one-year Break-In-Service, all Credited Service and Pension Credit earned after any prior Break-In-Service and before such one-year Break-In-Service, will be cancelled. Such Credited Service and Pension Credit will be restored if he returns to Covered Employment and earns at least 500 hours of Credited Service in a Plan Year or 300 hours of Pension Credit in any consecutive 12-month period before he incurs a number of consecutive one-year Breaks-In-Service that exceeds the aggregate number of the Participant's years of Credited Service or years of Pension Credit

earned before the first of the consecutive one-year Breaks-In-Service. A Participant who returns to Covered Employment after a Break-In-Service resulting in the cancellation of Credited Service and Pension Credit will resume participation subject to Article II.

**C. Permanent Break-In-Service After December 31, 1986.** After December 31, 1986, a non-vested Participant's Pension Credit and Credited Service, earned after any prior one-year Break-In-Service and that resulted in the cancellation of previously accrued Credited Service and Pension Credit, will be cancelled only if the Participant incurs a Permanent Break-In-Service. Credited Service and Pension Credit cancelled before January 1, 1987, by reason of a Break-In-Service shall be disregarded after December 31, 1986.

**D. Exemption from the Break-In-Service Provisions.** Effective June 1, 1961, and notwithstanding other provisions of this article, a Participant shall be exempt from cancellation of accumulated Pension Credit and Credited Service due to a Break-In-Service if the Break-In-Service is attributable to a leave of absence due to disability, the inability (despite reasonable effort) to obtain Covered Employment or Military Service, excluding periods of voluntary re-enlistment, provided the Participant, at the time of application for a leave of absence, has at least three hundred (300) hours of Pension Credit. An application for the leave of absence must be submitted in writing on a form required by the Board before the occurrence of any irrevocable cancellation of Pension Credit and Credited Service otherwise provided under this article. The Board may grant additional exemptions from the provisions of this article on a nondiscriminatory basis in its sole discretion for good and sufficient reasons upon written application of any Participant pursuant to such rules as the Board may establish, provided that no such additional exemption shall extend in excess of two years beyond the date under which accumulated Pension Credit would otherwise be cancelled in accordance with this Plan.

**E. Restoration of Pre-June 1, 1973, Service.** A Participant who accumulated 10 or more years of Future Service on or before June 1, 1973, that was cancelled solely as a result of such Participant's failure to attain age 55 on or before June 1, 1974, (or such earlier date as the Participant terminated Covered Service), shall have such cancelled Future Service restored for vesting and benefit accrual purposes; provided the Participant (i) Covered Employment to accept employment otherwise covered by an IBEW Local 6 Memoranda of Understanding or a Collective Bargaining Agreement, (ii) earned at least one year of Future Service after June 1, 1973, (iii) has a pension start date that is after December 31, 1993.

## **ARTICLE VIII** **APPLICATION AND PAYMENT**

**A. General Pension Application Rules.** A pension application shall be made on such forms, and otherwise in the manner, required by the Plan and the Board, and shall include any information requested by the Board that is reasonably required to administer the Plan. If such information is not provided reasonably promptly, the Board may deny, suspend or discontinue benefits. All applications for benefits shall be submitted to the office of the Plan Manager.

**B. When Benefits Are Payable**

1. General Rule. A Participant's pension start date is the first day of any month elected by the Participant, provided:

- (i) the Participant is otherwise eligible to commence a pension on such date;
- (ii) such date is no later than the latest pension start date described in section C; and
- (iii) except as provided in paragraph 3, the pension start date, and the date that payments actually commence, fall during the 180-day period that begins on the date that the Explanation of Benefits described in section E.1 of article III is provided.

Any single sum make-up benefit payment that is paid by reason of a pension commencing under this paragraph, or paragraph 2, more than 30 days later than the pension start date shall include simple interest at 5% per year.

2. Delayed Pension – No Retroactive Start Date. Effective January 1, 2011, payments pursuant to a Normal Pension with a pension start date that falls after the first day of the first month following the date the Participant attains Normal Retirement Age is actuarially increased by applying the factors contained in the table in Appendix H (Actuarial Increase Factors for Late Retirement). The monthly benefit amount computed as of the delayed pension start date shall be reduced by the actuarial equivalent of the value of all prior monthly payments that would have been suspended by reason of the Participant working in Prohibited Employment as described in section E of article III after having commenced a single life annuity at Normal Retirement Age. Should the Participant work in Prohibited Employment after such delayed pension start date, the suspension shall be imposed on the Participant's full actual monthly payment.

3. Delayed Pension - Retroactive Start Date. Effective January 1, 2011, a living Participant who is eligible to elect a pension under paragraph 1 may elect a pension start date that falls before the beginning of the 180-day period described in section E.1 of Article III. Such pension start date may be retroactive to the first day of any month following the date the Participant attained Normal Retirement Age or, after December 31, 2012, the commencement date of a Disability Pension as provided under section C.2 of Article III; provided, however, that (i) the spousal consent requirements must be satisfied on the date benefits actually commence and (ii) a make-up payment reflecting additional interest based upon the applicable interest rate described in section E.5 of article III is paid to the Participant (reflecting an appropriate suspension of any monthly payment that would have been suspended because of the application of section E of article III). Effective January 1, 2013, any married Participant who elects a Joint and Survivor Annuity form of benefit under this subsection will be deemed married to his or her current Spouse as of the retroactive pension start date hereunder whether or not actually married to that Spouse on the retroactive pension start date.

**C. Mandatory Pension Start Date.** A Participant's pension start date shall be no later than the 60<sup>th</sup> day following the close of the Plan Year in which occurs the later of (i) the Participant's attainment of Normal Retirement Age and (ii) the Participant's requested pension start date. In no event will a Participant's benefits actually begin to be paid later than the April 15 of the year following the year in which the Participant attains age 70- $\frac{1}{2}$  or retires, whether or not he applies for benefits. Notwithstanding any other provision of the Plan, benefit payments will be made in accordance with Code §401(a)(9) and Treasury Regulation §1.401(a)(9)-2 through §1.401(a)(9)-9, including the minimum distribution incidental benefit requirements set forth in Treasury Regulation §1.401(a)(9)-6, Q&A-2.



**D. Payments to Incompetents.** If the Board determines that a Participant or Beneficiary payee is mentally or physically incompetent, the Board may pay the payee's benefit payments to such person as the Board, in its sole discretion, determines will apply such payments appropriately for the benefit of the payee.

**E. How and To Whom Pension Payments Are Made.** Benefit payments shall be mailed to the last known address of the payee, which shall fully discharge the Plan's liability for such payment. Upon a Participant's death, the Plan shall pay the Participant's designated Beneficiary (or as otherwise provided by the Plan), which shall fully discharge the Plan's liability for such payment. In the event of competing claims to benefit payments, the Board may deposit (interplead) disputed funds to an appropriate court for resolution of the dispute.

**F. Recovery of Improperly Paid Benefits.** Benefits that are improperly paid because of false information or statements made by the Participant shall be recovered by the Plan, including by offset against future benefit payments (under the same general rules set forth in Section III.F.2(c)) or by an action in court, together with costs, including attorney fees and interest on such amounts.

## **ARTICLE IX RESOLUTION OF DISPUTES**

**A. Trustees to Resolve Benefit Disputes.** No Participant, Employee, Beneficiary or other person shall have any right or claim to benefits under the Plan, or any right or claim to payments from the Plan, other than as specified herein. Any dispute as to eligibility, type, amount or duration of benefits or any right or claim to payments from the Plan shall be resolved by the Board pursuant to the Plan, and the Board's decision on the dispute, right or claim shall be final and binding upon all parties thereto.

**B. Claim Denial.** Any person ("claimant") whose application for Plan benefits has been denied in whole or in part, or whose claim against the Plan is otherwise denied, shall be notified in writing of such denial within 90 days after receipt of such application or claim. An extension of time not exceeding 90 days may be required by special circumstances, provided a notice of such extension (indicating the special circumstances that exist and the date by which a final decision is expected), is furnished to the claimant before the expiration of the initial 90-day period. A notice of denial shall set forth in a manner calculated to be understood by the claimant (i) the specific reason or reasons for the denial, (ii) specific reference to pertinent Plan provisions on which the denial is based, (iii) a description of any additional material or information that is necessary for the claimant to perfect the claim and an explanation of why such material or information is necessary and (iv) appropriate information as to the steps to be taken if the claimant wishes to submit his claim for review.

### **C. Appeal of a Claim Denial**

**1. General Appeal Right.** A Participant or Beneficiary may appeal to the Board for a review of the denial. An appeal shall be in writing, state in clear and concise terms the reason or reasons for disputing the denial, be accompanied by any pertinent documentary material not already furnished to the Plan, and be filed by the claimant or his duly authorized representative with the Plan Manager within the 60-day beginning on the date of the denial.

2. **Trustee Hearing.** If likely to facilitate a proper result, the Board may permit an appeal to be amended or supplemented, and may grant a hearing on the appeal before at least one Employer-appointed Trustee and one Union-appointed Trustee to hear any evidence or argument that cannot be presented satisfactorily in writing. The failure to either file an appeal within the 60-day appeal period or to request a hearing shall constitute a waiver of the claimant's right to review of the denial. The Board may relieve a claimant from such waiver for good cause if application for such relief is made within one year from the date of the denial.

3. **Right to Written Decision.** An appeal will be considered at the next succeeding regular Board meeting following receipt of the appeal, except that an appeal received within thirty (30) days of the next regular meeting may be determined no later than the second regular meeting following its receipt. If special circumstances arise necessitating a delay in determining the appeal, a determination will be made no later than the third meeting following receipt of the appeal. The appellant will be so notified of the extension beforehand. The appellant shall be furnished a written decision on the appeal, stating the specific conclusions in a manner calculated to be understood by the appellant and the pertinent Plan provisions relied upon. The Board shall notify the appellant of its decision within 60 days following the date of the meeting at which the decision is rendered. If a decision on the appeal is not made within the time periods provided herein, the appeal shall be deemed denied. If either the appellant or the Board desires to submit the denial to further review, the matter may be submitted to arbitration upon written request in accordance with the procedures described in section E.

**D. Finality of Decision on Claims.** The denial of a claim after the right to review has been waived or the decision of the Board on an appeal has been issued, shall be final and binding upon all parties. This article shall apply to and include any and every claim to benefits from the Plan, and any claim or right asserted under the Plan or against the Plan, regardless of the basis asserted for the claim, when the act or omission upon which the claim is based occurred and whether the claimant is a Participant or Beneficiary.

**E. Arbitration by Mutual Agreement.** The Board may, but not required to, agree to arbitrate a disputed claim upon request of a claimant. The terms of any such agreement to arbitrate shall be mutually agreeable to the claimant and the Board. Any such agreement to arbitrate shall specify that the parties agree that no appeal will be made from the arbitration decision except upon grounds for appeal from an arbitration award pursuant to the provisions of the U.S. Code applicable to disputes other than a dispute involving an Employee Benefit Plan as the term is defined in ERISA.

**F. Judicial Review.** A claimant may bring an action for benefits in state or federal after a final decision by the Board on the claimant's appeal has been denied; provided, however, that no such action may be filed later than two years after the date that the final denial is communicated in writing to the claimant.

## **ARTICLE X**

### **GENERAL PROVISIONS**

**A. Furnishing False Information.** A Participant and Beneficiary shall promptly furnish, at the request of the Board, any information or proof reasonably required for the administration of the Plan or for the determination of any matter properly before the Board. Failure to do so shall be sufficient reason to deny or suspend benefits to such Participant or

Beneficiary. Submitting false information purposely or negligently shall be sufficient reason for the denial, suspension or discontinuance of Plan benefits that are based on such information, and the Board shall have the right to recover any payments made in reliance thereon, together with expenses and attorney fees incurred in effecting recovery.

**B. Assignment or Alienation Prohibition**

1. General Rules. No Participant or Beneficiary may assign, alienate, transfer, encumber, pledge, mortgage, hypothecate, anticipate or impair in any manner his legal or beneficial interest of the Plan. Neither the Plan, the Trust nor any of the assets thereof, shall be liable for the debts of any Participant or Beneficiary entitled to any benefits under this Plan, nor be subject to attachment or execution or process in any court or action or proceeding. The provisions of this section shall not be applicable to any assignment or alienation pursuant to a QDRO or an assignment to the Welfare Trust, as provided in this section.

2. QDROs. A domestic relations order issued before January 1, 1985 will be treated as a QDRO if payment of benefits pursuant to the order have commenced as of such date, and the Board, in its sole discretion, may treat such an order as a QDRO if payment of benefits has not commenced as of such date, even though the order does not satisfy all requirements of a QDRO. The Board shall adopt procedures for administering QDROs, which may include the preparation and distribution of a sample QDRO.

3. Assignment to Welfare Trust. A Participant and Beneficiary may execute a voluntary and revocable assignment of benefits to the Welfare Trust for the sole purpose of making monthly co-payments required to maintain retiree health and welfare coverage. Such assignment shall conform with the requirements of Treasury Regulation §1.401(a)-13(e), and shall be unenforceable by the Welfare Trust except as to payments actually made under the assignment before any notice of the assignment's revocation.

**C. No Reversion to Employers.** Plan assets shall be administered, maintained, invested and handled for the sole and exclusive benefit of Participants and Beneficiaries. Other than the payment of any reasonable and lawful expenses of the Plan and any lawful refund of money to an Employer made by a good faith mistake of fact or law, there shall be no reversion of Plan assets to any Employer.

**D. Saving Clause.** If any Plan provision is determined to be illegal or invalid for any reason, such determination shall not affect the remaining provisions of the Plan, and the Plan shall be construed and enforced as if the invalid provision had not been included.

**E. Governing Law.** The Plan shall be construed, administered and governed under ERISA, other applicable federal law and, to the extent not preempted by federal law, California law. Any provision susceptible to more than one interpretation shall be interpreted consistent with the Plan and Trust being a tax-qualified plan and trust within the meaning of the Code.

**F. Headings.** Headings in this document are provided for convenience of reference only. In the event of any conflict between a heading and the text, the text shall control.

**G. Word Usage.** When appearing herein, the masculine gender includes the feminine gender, and the plural includes the singular (and visa versa), unless the context indicates to the contrary. The hierarchy of Plan provisions are articles, sections, subsections,

paragraphs, subparagraphs, clauses and subclauses, in descending order stated, with clauses also applied to a segment within a sentence.

## **ARTICLE XI**

### **LIABILITY FOR CONTRIBUTIONS**

**A. General Limitations.** Neither the Union, the Association, the Board, nor any Employer guarantee the payment of any benefit under this Plan, nor shall their officers or agents shall have any liability whatsoever for any decision or act by the Board, the Plan Manager or any person charged with any duty or implementing or administering any provision of the Plan or Trust. Benefits shall be paid only to the extent that funds are available in the Trust Fund. The Board shall not be liable for any decision or action (beyond any liability for obligations under the Plan) of any Employer, the Union or the Association. Except as provided by ERISA (including the withdrawal liability provisions thereof), an Employer shall be discharged of all obligations to contribute under the Plan upon making contributions required under applicable Collective Bargaining Agreements and Subscription Agreements.

**B. Withdrawal Liability Method.** The liability of any Employer that ceases to be obligated to the Plan under Collective Bargaining Agreements and Subscription Agreements shall be determined pursuant to the presumptive method set forth in ERISA §4211 as applicable to the Building and Construction Industry, including regulations issued by the Pension Benefit Guaranty Corporation applicable to determining withdrawal liability under such method.

**C. Military Service.** The Board, the Union and the Association may jointly determine the allocation of liability for Plan contributions with respect to benefit accruals attributable to Military Service, provided that the allocation reasonably reflects the Employee's connection to the Employer.

## **ARTICLE XII**

### **NON-BARGAINING UNIT EMPLOYEE REQUIREMENTS**

**A. General Participation Rules.** Participation in the Plan of an employee who is not covered by a collective bargaining agreement ("nonbargained employee") is subject to the requirement that the employee satisfy all coverage requirements under Code §410(b), the nondiscrimination requirements under Code §401(a)(4) and the participation requirements of Code §401(a)(26), and Treasury regulations issued thereunder. The Board shall have broad authority to suspend or terminate the participation of any and all nonbargained employees in order for the Plan to remain in compliance with these requirements, and the Employer of a nonbargained employee shall cooperate with the Board to the fullest extent to ensure such compliance (*e.g.*, when determining highly compensated employees within the meaning of Code §414(q)).

**B. Top-Heavy Rules.** If the Plan is or becomes top-heavy within the meaning of Code §416, the Plan shall comply with Code §416 with respect to key employees. Code §416 and the regulations thereunder are hereby incorporated by reference.

## **ARTICLE XIII**

### **INTERPRETING AND AMENDING THE PLAN**

**A. Interpreting Plan.** The Board has the exclusive power and discretion to interpret the provisions of the Plan and any rules issued under the Plan, and to determine all questions

arising under the Plan including eligibility for benefits. Its interpretation shall be binding on all parties. The Plan's provisions are designed and intended to comply with the Code and ERISA, as amended, and the construction and interpretation of the Plan shall be consistent with the Code, ERISA and the Trust Agreement. No person may rely upon any interpretation by any individual Trustee, Union officer or representative, Employer or any other person regarding Plan benefits or otherwise. Any question of interpretation should be directed in writing to the Board. No oral statement of any individual, including a Plan official, may be the basis of any claim for benefits if such statement conflicts with the provisions of the Plan or Trust Agreement, as determined by the Board.

**B. Amending the Plan.** The Union and the Employers signatory to the Trust jointly may amend or modify this Plan at any time or from time to time in accordance with the terms of the Trust, provided the amendment is actuarially sound. The Board also may amend or modify this Plan, provided that no amendment or modification may reduce any accrued benefit except as permitted or required by ERISA and the Code, including regulations thereunder. In no event shall any amendments or modification of this Plan or the terms of the Trust cause or result in any portion of the Trust Fund reverting to or being recovered by any Employer, the Association or the Union, or cause or result in the expenditure of any portion of the Trust Fund for any purpose other than the exclusive benefit of Participants and their Beneficiaries, and the payment of authorized expenditures of the Trust for administrative purposes. No amendment to the Plan may conflict with any law or valid government regulation, nor render any contribution to the Plan in the year contributed nondeductible for tax purposes by the contributing Employer or taxable to Participants, or otherwise cause the loss of the Plan's tax exemption. If any Collective Bargaining Agreement is amended in a manner that affects this Plan, the Board shall amend the Plan to effectuate the intent of the Collective Bargaining Agreement to the extent consistent with this section.

#### **ARTICLE XIV** **TERMINATION AND MERGER**

**A. Right to Terminate.** The Association and the Union, acting jointly, may discontinue or terminate the Plan. The rights of all affected Participants to benefits accrued to the date of the termination, partial termination, or discontinuance to the extent funded as of such date shall be nonforfeitable except as modified by directives of the Pension Benefit Guaranty Corporation. In the event of the Plan's termination, the Plan's assets shall be converted into cash, and after payment of all costs or charges incidental to the allocation and distribution of assets, the Board shall direct that the Plan's assets be distributed to Participants as follows:

1. In the case of benefits payable as an annuity, and for a Participant or Beneficiary in pay status as of the beginning of the three-year period ending on the Plan's termination date, or who could have been in pay status as of such date, to each such individual based on the Plan provisions in effect during the five-year period ending on the termination date under which such benefit would be the least. The lowest benefit in pay status during a three-year period shall be considered the benefit in pay status for such period.
2. To provide all other benefits for Participants and Beneficiaries that would be guaranteed under the termination insurance provisions of ERISA.

3. To provide all other vested Plan benefits.
4. To all other Plan benefits.

If assets available for allocation under any priority category are insufficient to provide in full the benefits of all individuals, the assets shall be allocated pro-rata among such individuals on the basis of the present value of each individual's benefits as of the termination date. The Board shall have total discretion to make distributions and allocations under this section.

**B. Merger.** In the event of a merger or consolidation of the Plan with any other plan, or a transfer of assets or liabilities from the Plan to another plan, each Participant and Beneficiary shall be entitled to a benefit immediately after such merger, consolidation or transfer that is no less than the benefit to which he would have been entitled immediately before such merger, consolidation or transfer. For purposes of this section, the benefit shall be determined as if the Plan had terminated as of the date of merger, consolidation or transfer.

**Union Trustees**

\_\_\_\_\_  
John Doherty

\_\_\_\_\_  
Michael McKenna

\_\_\_\_\_  
Matthew Bamberger

**Management Trustees**

\_\_\_\_\_  
Thomas A. Coleman

\_\_\_\_\_  
Kenneth Paganini

\_\_\_\_\_  
James Young

## **APPENDICES**

Appendix A: Adjustment Factors for a Joint and Survivor Annuity

Appendix B: Adjustment Factors for a Joint and Survivor Annuity for a Disability Pension

Appendix C: Adjustment Factors for a Joint and Survivor Annuity with a Pop-Up Feature

Appendix D: Adjustment Factors for a Joint and Survivor Annuity for a Disability Pension with a Pop-Up Feature

Appendix E: Lump Sum Death Benefit Factors (pre-Age 55)

Appendix F: Lump Sum Death Benefit Factors (post-Age 55)

Appendix G: Pension Enhancement Purchase Rates

NCEW 50% Joint Survivor Reduction Factors (Healthy)  
Benefit effective upon death of participant, if beneficiary then living: 50% of participant's benefit

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
55	0.1611	0.1593	0.1574	0.1555	0.1535	0.1514	0.1491	0.1468	0.1445	0.1420	0.1394	0.1368	0.1340	0.1312	0.1283
56	0.1703	0.1686	0.1667	0.1647	0.1627	0.1605	0.1583	0.1559	0.1535	0.1509	0.1483	0.1456	0.1428	0.1399	0.1369
57	0.1800	0.1782	0.1763	0.1743	0.1722	0.1700	0.1678	0.1654	0.1629	0.1603	0.1576	0.1549	0.1520	0.1491	0.1460
58	0.1901	0.1882	0.1863	0.1843	0.1822	0.1800	0.1777	0.1753	0.1727	0.1701	0.1674	0.1646	0.1616	0.1586	0.1555
59	0.2005	0.1987	0.1968	0.1947	0.1926	0.1904	0.1880	0.1856	0.1830	0.1803	0.1776	0.1747	0.1717	0.1686	0.1654
60	0.2114	0.2096	0.2076	0.2056	0.2034	0.2012	0.1988	0.1963	0.1937	0.1910	0.1882	0.1853	0.1822	0.1791	0.1758
61	0.2227	0.2208	0.2189	0.2168	0.2147	0.2124	0.2100	0.2075	0.2048	0.2021	0.1993	0.1963	0.1932	0.1900	0.1867
62	0.2344	0.2325	0.2306	0.2285	0.2263	0.2240	0.2216	0.2191	0.2164	0.2136	0.2108	0.2077	0.2046	0.2014	0.1980
63	0.2464	0.2446	0.2426	0.2405	0.2383	0.2360	0.2336	0.2310	0.2284	0.2256	0.2226	0.2196	0.2164	0.2131	0.2097
64	0.2589	0.2570	0.2550	0.2529	0.2507	0.2484	0.2459	0.2434	0.2407	0.2379	0.2349	0.2319	0.2287	0.2253	0.2218
65	0.2716	0.2697	0.2677	0.2656	0.2634	0.2611	0.2587	0.2561	0.2534	0.2505	0.2476	0.2445	0.2412	0.2379	0.2344
66	0.2846	0.2827	0.2808	0.2787	0.2764	0.2741	0.2717	0.2691	0.2663	0.2635	0.2605	0.2574	0.2541	0.2507	0.2472
67	0.2979	0.2961	0.2941	0.2920	0.2898	0.2874	0.2850	0.2824	0.2797	0.2768	0.2738	0.2707	0.2674	0.2640	0.2604
68	0.3116	0.3098	0.3078	0.3057	0.3035	0.3011	0.2987	0.2961	0.2934	0.2905	0.2875	0.2843	0.2810	0.2776	0.2740
69	0.3258	0.3239	0.3219	0.3199	0.3176	0.3153	0.3129	0.3103	0.3075	0.3047	0.3016	0.2985	0.2952	0.2917	0.2881
70	0.3403	0.3385	0.3365	0.3345	0.3323	0.3299	0.3275	0.3249	0.3222	0.3193	0.3163	0.3131	0.3098	0.3064	0.3027
71	0.3553	0.3535	0.3516	0.3495	0.3473	0.3450	0.3426	0.3400	0.3373	0.3344	0.3314	0.3282	0.3249	0.3215	0.3178
72	0.3707	0.3689	0.3670	0.3650	0.3628	0.3605	0.3581	0.3555	0.3528	0.3499	0.3470	0.3438	0.3405	0.3370	0.3334
73	0.3864	0.3846	0.3827	0.3807	0.3785	0.3763	0.3739	0.3713	0.3686	0.3658	0.3628	0.3597	0.3564	0.3529	0.3493
74	0.4026	0.4008	0.3989	0.3969	0.3948	0.3925	0.3901	0.3876	0.3849	0.3821	0.3792	0.3761	0.3728	0.3694	0.3658
75	0.4189	0.4172	0.4153	0.4133	0.4112	0.4090	0.4066	0.4041	0.4015	0.3987	0.3958	0.3927	0.3894	0.3860	0.3824

Mortality: Participant UP84+1  
Beneficiary UP84-4

Interest Rate: 6%



NCEW 50% Joint Survivor Reduction Factors (Healthy)  
Benefit effective upon death of participant, if beneficiary then living: 50% of participant's benefit

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
55	0.1253	0.1223	0.1192	0.1160	0.1127	0.1094	0.1061	0.1027	0.0992	0.0958	0.0923	0.0888	0.0852	0.0817	0.0782
56	0.1339	0.1307	0.1275	0.1242	0.1208	0.1174	0.1139	0.1104	0.1068	0.1032	0.0995	0.0958	0.0922	0.0885	0.0848
57	0.1429	0.1396	0.1363	0.1329	0.1294	0.1259	0.1222	0.1186	0.1148	0.1111	0.1072	0.1034	0.0995	0.0956	0.0917
58	0.1523	0.1489	0.1455	0.1420	0.1384	0.1348	0.1310	0.1272	0.1233	0.1194	0.1154	0.1114	0.1073	0.1033	0.0992
59	0.1621	0.1587	0.1552	0.1516	0.1479	0.1441	0.1403	0.1363	0.1323	0.1282	0.1241	0.1199	0.1157	0.1114	0.1071
60	0.1725	0.1690	0.1654	0.1617	0.1579	0.1540	0.1500	0.1459	0.1418	0.1376	0.1333	0.1289	0.1245	0.1200	0.1156
61	0.1833	0.1797	0.1760	0.1722	0.1684	0.1644	0.1603	0.1561	0.1518	0.1474	0.1429	0.1384	0.1338	0.1292	0.1245
62	0.1945	0.1909	0.1871	0.1833	0.1793	0.1752	0.1710	0.1666	0.1622	0.1577	0.1531	0.1484	0.1437	0.1389	0.1340
63	0.2062	0.2025	0.1987	0.1947	0.1906	0.1865	0.1821	0.1777	0.1732	0.1685	0.1638	0.1590	0.1540	0.1490	0.1440
64	0.2182	0.2145	0.2106	0.2066	0.2025	0.1982	0.1938	0.1892	0.1846	0.1798	0.1749	0.1699	0.1649	0.1597	0.1545
65	0.2307	0.2269	0.2230	0.2189	0.2147	0.2103	0.2058	0.2012	0.1964	0.1915	0.1865	0.1814	0.1762	0.1708	0.1654
66	0.2435	0.2397	0.2357	0.2315	0.2272	0.2228	0.2182	0.2135	0.2087	0.2037	0.1985	0.1933	0.1879	0.1824	0.1768
67	0.2567	0.2528	0.2487	0.2446	0.2402	0.2357	0.2311	0.2263	0.2213	0.2162	0.2110	0.2056	0.2001	0.1944	0.1887
68	0.2702	0.2663	0.2623	0.2580	0.2536	0.2491	0.2444	0.2395	0.2345	0.2293	0.2239	0.2184	0.2128	0.2070	0.2011
69	0.2843	0.2804	0.2763	0.2720	0.2676	0.2630	0.2582	0.2533	0.2482	0.2429	0.2374	0.2318	0.2261	0.2202	0.2141
70	0.2989	0.2950	0.2909	0.2866	0.2821	0.2774	0.2726	0.2676	0.2624	0.2571	0.2516	0.2459	0.2400	0.2340	0.2278
71	0.3140	0.3101	0.3059	0.3016	0.2971	0.2924	0.2876	0.2825	0.2773	0.2719	0.2663	0.2605	0.2545	0.2484	0.2421
72	0.3296	0.3256	0.3215	0.3172	0.3126	0.3079	0.3030	0.2980	0.2927	0.2872	0.2816	0.2757	0.2697	0.2635	0.2570
73	0.3455	0.3416	0.3374	0.3331	0.3285	0.3238	0.3189	0.3138	0.3085	0.3030	0.2973	0.2914	0.2853	0.2790	0.2725
74	0.3620	0.3580	0.3539	0.3495	0.3450	0.3403	0.3354	0.3302	0.3249	0.3194	0.3136	0.3077	0.3015	0.2952	0.2886
75	0.3787	0.3747	0.3706	0.3663	0.3618	0.3570	0.3521	0.3470	0.3417	0.3361	0.3303	0.3244	0.3182	0.3117	0.3051

Mortality: Participant UP84+1  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 50% Joint Survivor Reduction Factors (Healthy)  
Benefit effective upon death of participant, if beneficiary then living: 50% of participant's benefit

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
55	0.0747	0.0713	0.0678	0.0644	0.0611	0.0578	0.0546	0.0515	0.0484	0.0454	0.0425	0.0398	0.0371	0.0346	0.0321
56	0.0811	0.0774	0.0737	0.0701	0.0666	0.0631	0.0596	0.0562	0.0530	0.0498	0.0467	0.0437	0.0408	0.0380	0.0353
57	0.0878	0.0840	0.0801	0.0763	0.0725	0.0687	0.0650	0.0614	0.0579	0.0545	0.0511	0.0479	0.0448	0.0418	0.0389
58	0.0951	0.0910	0.0869	0.0828	0.0788	0.0748	0.0709	0.0670	0.0632	0.0596	0.0560	0.0525	0.0491	0.0459	0.0427
59	0.1028	0.0985	0.0942	0.0899	0.0856	0.0814	0.0772	0.0731	0.0690	0.0651	0.0612	0.0575	0.0539	0.0504	0.0470
60	0.1110	0.1065	0.1020	0.0974	0.0929	0.0884	0.0840	0.0796	0.0753	0.0711	0.0670	0.0630	0.0591	0.0553	0.0516
61	0.1198	0.1150	0.1103	0.1055	0.1007	0.0960	0.0913	0.0867	0.0821	0.0776	0.0732	0.0689	0.0647	0.0606	0.0566
62	0.1291	0.1241	0.1191	0.1141	0.1091	0.1041	0.0991	0.0942	0.0893	0.0845	0.0798	0.0752	0.0707	0.0664	0.0621
63	0.1388	0.1206	0.1284	0.1232	0.1179	0.1127	0.1074	0.1022	0.0971	0.0920	0.0870	0.0821	0.0773	0.0726	0.0680
64	0.1491	0.1437	0.1383	0.1328	0.1273	0.1218	0.1163	0.1108	0.1053	0.0999	0.0946	0.0894	0.0843	0.0793	0.0744
65	0.1599	0.1543	0.1486	0.1429	0.1372	0.1314	0.1256	0.1198	0.1141	0.1084	0.1028	0.0972	0.0918	0.0865	0.0812
66	0.1711	0.1653	0.1594	0.1535	0.1475	0.1415	0.1354	0.1294	0.1233	0.1173	0.1114	0.1055	0.0998	0.0941	0.0885
67	0.1828	0.1768	0.1707	0.1646	0.1583	0.1521	0.1457	0.1394	0.1331	0.1268	0.1205	0.1143	0.1082	0.1022	0.0963
68	0.1950	0.1889	0.1826	0.1762	0.1698	0.1632	0.1567	0.1500	0.1434	0.1368	0.1302	0.1237	0.1173	0.1109	0.1046
69	0.2079	0.2016	0.1951	0.1885	0.1819	0.1751	0.1683	0.1614	0.1545	0.1475	0.1407	0.1338	0.1270	0.1203	0.1136
70	0.2215	0.2149	0.2083	0.2015	0.1946	0.1876	0.1806	0.1734	0.1662	0.1590	0.1518	0.1446	0.1375	0.1304	0.1245
71	0.2356	0.2290	0.2222	0.2152	0.2081	0.2009	0.1936	0.1862	0.1787	0.1712	0.1637	0.1562	0.1487	0.1412	0.1338
72	0.2504	0.2436	0.2367	0.2296	0.2223	0.2149	0.2073	0.1997	0.1919	0.1841	0.1763	0.1685	0.1607	0.1529	0.1451
73	0.2658	0.2588	0.2518	0.2445	0.2370	0.2290	0.2217	0.2138	0.2058	0.1977	0.1896	0.1815	0.1734	0.1652	0.1570
74	0.2818	0.2748	0.2675	0.2601	0.2525	0.2447	0.2368	0.2287	0.2205	0.2121	0.2038	0.1953	0.1869	0.1784	0.1698
75	0.2982	0.2911	0.2842	0.2763	0.2685	0.2606	0.2524	0.2441	0.2357	0.2272	0.2185	0.2098	0.2010	0.1922	0.1833

Mortality: Participant UP84+1  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 66.67% Joint Survivor Reduction Factors (Healthy)  
Benefit effective upon death of participant, if beneficiary then living: 66.67% of participant's benefit

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
55	0.2038	0.2017	0.1995	0.1971	0.1947	0.1921	0.1894	0.1867	0.1838	0.1808	0.1776	0.1744	0.1711	0.1676	0.1641
56	0.2149	0.2128	0.2106	0.2082	0.2057	0.2031	0.2004	0.1976	0.1947	0.1916	0.1885	0.1852	0.1818	0.1783	0.1746
57	0.2264	0.2243	0.2220	0.2197	0.2172	0.2146	0.2118	0.2090	0.2060	0.2029	0.1997	0.1964	0.1929	0.1893	0.1856
58	0.2383	0.2362	0.2339	0.2315	0.2290	0.2264	0.2237	0.2208	0.2178	0.2146	0.2114	0.2080	0.2045	0.2009	0.1971
59	0.2506	0.2485	0.2462	0.2438	0.2413	0.2387	0.2359	0.2330	0.2300	0.2268	0.2235	0.2201	0.2166	0.2129	0.2091
60	0.2633	0.2612	0.2589	0.2565	0.2540	0.2514	0.2486	0.2457	0.2426	0.2394	0.2361	0.2327	0.2291	0.2253	0.2215
61	0.2764	0.2743	0.2720	0.2696	0.2671	0.2645	0.2617	0.2587	0.2557	0.2525	0.2491	0.2457	0.2420	0.2383	0.2343
62	0.2899	0.2877	0.2855	0.2831	0.2806	0.2779	0.2751	0.2722	0.2691	0.2659	0.2626	0.2591	0.2554	0.2516	0.2477
63	0.3037	0.3015	0.2993	0.2969	0.2944	0.2917	0.2889	0.2860	0.2829	0.2797	0.2764	0.2728	0.2692	0.2653	0.2614
64	0.3177	0.3156	0.3134	0.3110	0.3085	0.3059	0.3031	0.3002	0.2971	0.2939	0.2905	0.2870	0.2833	0.2794	0.2754
65	0.3321	0.3300	0.3278	0.3254	0.3229	0.3203	0.3175	0.3146	0.3115	0.3083	0.3049	0.3014	0.2977	0.2939	0.2898
66	0.3466	0.3445	0.3423	0.3400	0.3375	0.3349	0.3321	0.3292	0.3262	0.3230	0.3196	0.3161	0.3124	0.3085	0.3045
67	0.3614	0.3593	0.3571	0.3548	0.3523	0.3498	0.3470	0.3441	0.3411	0.3379	0.3345	0.3310	0.3273	0.3235	0.3195
68	0.3764	0.3744	0.3722	0.3699	0.3675	0.3649	0.3622	0.3593	0.3563	0.3531	0.3498	0.3463	0.3426	0.3388	0.3348
69	0.3918	0.3898	0.3877	0.3854	0.3830	0.3804	0.3778	0.3749	0.3719	0.3688	0.3655	0.3620	0.3583	0.3545	0.3505
70	0.4076	0.4056	0.4035	0.4012	0.3989	0.3963	0.3937	0.3909	0.3879	0.3848	0.3815	0.3781	0.3744	0.3706	0.3667
71	0.4236	0.4217	0.4196	0.4174	0.4150	0.4126	0.4099	0.4072	0.4042	0.4012	0.3979	0.3945	0.3909	0.3871	0.3832
72	0.4400	0.4381	0.4360	0.4339	0.4316	0.4291	0.4265	0.4238	0.4209	0.4179	0.4147	0.4113	0.4077	0.4040	0.4001
73	0.4564	0.4546	0.4526	0.4504	0.4482	0.4458	0.4432	0.4406	0.4377	0.4347	0.4316	0.4282	0.4247	0.4211	0.4172
74	0.4733	0.4714	0.4695	0.4674	0.4652	0.4628	0.4603	0.4577	0.4549	0.4520	0.4489	0.4456	0.4421	0.4385	0.4347
75	0.4901	0.4883	0.4864	0.4844	0.4822	0.4799	0.4775	0.4749	0.4721	0.4692	0.4662	0.4630	0.4596	0.4560	0.4523

Mortality: Participant UP84+1  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 66.67% Joint Survivor Reduction Factors (Healthy)  
 Benefit effective upon death of participant, if beneficiary then living: 66.67% of participant's benefit

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
55	0.1604	0.1567	0.1528	0.1489	0.1449	0.1408	0.1366	0.1323	0.1281	0.1237	0.1193	0.1149	0.1105	0.1061	0.1017
56	0.1709	0.1670	0.1631	0.1590	0.1549	0.1507	0.1464	0.1420	0.1375	0.1330	0.1284	0.1238	0.1192	0.1146	0.1099
57	0.1818	0.1779	0.1738	0.1697	0.1654	0.1611	0.1566	0.1521	0.1475	0.1428	0.1381	0.1333	0.1284	0.1236	0.1187
58	0.1932	0.1892	0.1851	0.1808	0.1764	0.1720	0.1674	0.1627	0.1580	0.1531	0.1482	0.1432	0.1382	0.1331	0.1280
59	0.2051	0.2010	0.1968	0.1924	0.1880	0.1834	0.1787	0.1739	0.1690	0.1640	0.1589	0.1537	0.1485	0.1432	0.1379
60	0.2175	0.2133	0.2090	0.2046	0.2000	0.1953	0.1905	0.1856	0.1805	0.1754	0.1701	0.1648	0.1594	0.1539	0.1484
61	0.2303	0.2261	0.2217	0.2172	0.2126	0.2078	0.2028	0.1978	0.1926	0.1873	0.1819	0.1764	0.1708	0.1652	0.1594
62	0.2435	0.2393	0.2349	0.2303	0.2256	0.2207	0.2157	0.2105	0.2052	0.1998	0.1943	0.1886	0.1828	0.1770	0.1710
63	0.2572	0.2529	0.2484	0.2438	0.2390	0.2341	0.2290	0.2237	0.2183	0.2128	0.2071	0.2013	0.1954	0.1893	0.1832
64	0.2713	0.2669	0.2624	0.2577	0.2529	0.2479	0.2427	0.2373	0.2319	0.2262	0.2204	0.2145	0.2084	0.2022	0.1959
65	0.2856	0.2813	0.2767	0.2720	0.2671	0.2621	0.2568	0.2514	0.2458	0.2401	0.2342	0.2281	0.2219	0.2155	0.2090
66	0.3003	0.2959	0.2914	0.2866	0.2817	0.2766	0.2713	0.2658	0.2601	0.2543	0.2483	0.2421	0.2358	0.2293	0.2226
67	0.3152	0.3109	0.3063	0.3015	0.2966	0.2914	0.2861	0.2805	0.2748	0.2689	0.2628	0.2565	0.2501	0.2435	0.2367
68	0.3306	0.3262	0.3216	0.3168	0.3118	0.3067	0.3013	0.2957	0.2900	0.2840	0.2778	0.2715	0.2649	0.2582	0.2513
69	0.3463	0.3419	0.3373	0.3326	0.3276	0.3224	0.3170	0.3114	0.3056	0.2996	0.2934	0.2870	0.2803	0.2735	0.2665
70	0.3625	0.3581	0.3535	0.3488	0.3438	0.3386	0.3332	0.3276	0.3218	0.3157	0.3095	0.3030	0.2963	0.2894	0.2823
71	0.3791	0.3747	0.3702	0.3654	0.3605	0.3553	0.3499	0.3443	0.3384	0.3324	0.3261	0.3196	0.3129	0.3059	0.2987
72	0.3960	0.3917	0.3872	0.3825	0.3775	0.3724	0.3670	0.3614	0.3556	0.3495	0.3432	0.3367	0.3299	0.3229	0.3157
73	0.4131	0.4089	0.4044	0.3997	0.3948	0.3897	0.3844	0.3788	0.3730	0.3669	0.3607	0.3541	0.3474	0.3403	0.3331
74	0.4307	0.4265	0.4221	0.4174	0.4126	0.4075	0.4022	0.3967	0.3909	0.3849	0.3786	0.3721	0.3653	0.3583	0.3510
75	0.4483	0.4442	0.4398	0.4352	0.4305	0.4254	0.4202	0.4147	0.4090	0.4030	0.3968	0.3903	0.3835	0.3765	0.3693

Mortality: Participant UP84+1  
 Beneficiary UP84-4

Interest Rate: 6%

NCEW 66.67% Joint Survivor Reduction Factors (Healthy)  
Benefit effective upon death of participant, if beneficiary then living: 66.67% of participant's benefit

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
55	0.0972	0.0928	0.0884	0.0841	0.0798	0.0756	0.0715	0.0674	0.0635	0.0597	0.0559	0.0523	0.0489	0.0455	0.0423
56	0.1053	0.1006	0.0960	0.0914	0.0868	0.0824	0.0779	0.0736	0.0694	0.0653	0.0613	0.0574	0.0536	0.0500	0.0466
57	0.1138	0.1089	0.1040	0.0992	0.0943	0.0896	0.0849	0.0803	0.0757	0.0713	0.0670	0.0629	0.0588	0.0549	0.0512
58	0.1229	0.1177	0.1126	0.1075	0.1024	0.0973	0.0923	0.0874	0.0826	0.0779	0.0733	0.0688	0.0645	0.0602	0.0562
59	0.1325	0.1272	0.1217	0.1164	0.1110	0.1056	0.1004	0.0951	0.0900	0.0850	0.0800	0.0752	0.0706	0.0661	0.0617
60	0.1428	0.1372	0.1315	0.1258	0.1202	0.1146	0.1090	0.1034	0.0980	0.0926	0.0873	0.0822	0.0772	0.0724	0.0676
61	0.1536	0.1477	0.1418	0.1359	0.1300	0.1240	0.1181	0.1123	0.1065	0.1008	0.0952	0.0898	0.0844	0.0792	0.0741
62	0.1650	0.1589	0.1527	0.1466	0.1403	0.1341	0.1279	0.1218	0.1156	0.1096	0.1037	0.0979	0.0922	0.0866	0.0811
63	0.1769	0.1545	0.1642	0.1578	0.1513	0.1448	0.1383	0.1318	0.1254	0.1190	0.1127	0.1065	0.1005	0.0945	0.0887
64	0.1894	0.1829	0.1763	0.1696	0.1628	0.1560	0.1492	0.1424	0.1357	0.1290	0.1223	0.1158	0.1093	0.1030	0.0968
65	0.2024	0.1957	0.1888	0.1819	0.1749	0.1678	0.1607	0.1536	0.1465	0.1395	0.1325	0.1256	0.1188	0.1121	0.1054
66	0.2158	0.2089	0.2019	0.1947	0.1875	0.1801	0.1728	0.1653	0.1579	0.1505	0.1432	0.1359	0.1287	0.1216	0.1146
67	0.2297	0.2226	0.2154	0.2080	0.2005	0.1930	0.1853	0.1776	0.1699	0.1622	0.1545	0.1468	0.1393	0.1318	0.1244
68	0.2442	0.2369	0.2295	0.2219	0.2142	0.2064	0.1985	0.1905	0.1825	0.1745	0.1664	0.1584	0.1505	0.1426	0.1348
69	0.2593	0.2519	0.2443	0.2365	0.2286	0.2206	0.2124	0.2042	0.1959	0.1875	0.1791	0.1708	0.1625	0.1542	0.1460
70	0.2750	0.2674	0.2597	0.2518	0.2437	0.2355	0.2271	0.2186	0.2100	0.2013	0.1927	0.1840	0.1753	0.1666	0.1594
71	0.2913	0.2837	0.2758	0.2677	0.2595	0.2511	0.2425	0.2337	0.2249	0.2159	0.2070	0.1979	0.1889	0.1799	0.1708
72	0.3082	0.3005	0.2925	0.2843	0.2759	0.2673	0.2586	0.2496	0.2405	0.2313	0.2221	0.2127	0.2034	0.1940	0.1845
73	0.3255	0.3177	0.3097	0.3014	0.2929	0.2837	0.2752	0.2661	0.2568	0.2474	0.2378	0.2282	0.2185	0.2088	0.1989
74	0.3435	0.3356	0.3275	0.3192	0.3106	0.3017	0.2926	0.2833	0.2738	0.2642	0.2544	0.2445	0.2346	0.2245	0.2143
75	0.3617	0.3538	0.3461	0.3373	0.3286	0.3197	0.3105	0.3010	0.2914	0.2816	0.2716	0.2614	0.2512	0.2408	0.2303

Mortality: Participant UP84+1  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 75% Joint Survivor Reduction Factors (Healthy)  
Benefit effective upon death of participant, if beneficiary then living: 75% of participant's benefit.

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
55	0.2236	0.2213	0.2189	0.2164	0.2138	0.2111	0.2082	0.2052	0.2021	0.1988	0.1955	0.1920	0.1884	0.1847	0.1809
56	0.2355	0.2332	0.2308	0.2283	0.2256	0.2229	0.2200	0.2170	0.2138	0.2105	0.2071	0.2036	0.1999	0.1962	0.1922
57	0.2477	0.2454	0.2430	0.2405	0.2379	0.2351	0.2322	0.2291	0.2259	0.2226	0.2192	0.2156	0.2119	0.2081	0.2041
58	0.2604	0.2581	0.2557	0.2531	0.2505	0.2477	0.2448	0.2417	0.2385	0.2352	0.2317	0.2281	0.2243	0.2204	0.2164
59	0.2734	0.2711	0.2687	0.2662	0.2635	0.2607	0.2578	0.2547	0.2515	0.2481	0.2446	0.2410	0.2372	0.2333	0.2292
60	0.2868	0.2845	0.2821	0.2796	0.2770	0.2742	0.2712	0.2681	0.2649	0.2615	0.2580	0.2544	0.2505	0.2466	0.2424
61	0.3006	0.2983	0.2959	0.2934	0.2908	0.2880	0.2850	0.2820	0.2787	0.2753	0.2718	0.2681	0.2643	0.2603	0.2561
62	0.3147	0.3125	0.3101	0.3076	0.3049	0.3021	0.2992	0.2961	0.2929	0.2895	0.2860	0.2823	0.2784	0.2744	0.2702
63	0.3291	0.3269	0.3245	0.3220	0.3194	0.3166	0.3137	0.3107	0.3074	0.3040	0.3005	0.2968	0.2929	0.2889	0.2847
64	0.3438	0.3416	0.3393	0.3368	0.3342	0.3314	0.3285	0.3255	0.3222	0.3189	0.3153	0.3117	0.3078	0.3038	0.2995
65	0.3587	0.3565	0.3542	0.3517	0.3492	0.3464	0.3435	0.3405	0.3373	0.3340	0.3304	0.3268	0.3229	0.3189	0.3147
66	0.3737	0.3716	0.3693	0.3669	0.3643	0.3616	0.3588	0.3557	0.3526	0.3492	0.3457	0.3421	0.3382	0.3342	0.3300
67	0.3890	0.3868	0.3846	0.3822	0.3797	0.3770	0.3742	0.3712	0.3680	0.3647	0.3612	0.3576	0.3538	0.3498	0.3456
68	0.4044	0.4023	0.4001	0.3977	0.3953	0.3926	0.3898	0.3869	0.3837	0.3805	0.3770	0.3734	0.3696	0.3656	0.3615
69	0.4202	0.4181	0.4160	0.4136	0.4112	0.4086	0.4058	0.4029	0.3998	0.3966	0.3932	0.3896	0.3858	0.3819	0.3778
70	0.4363	0.4342	0.4321	0.4298	0.4274	0.4248	0.4221	0.4192	0.4162	0.4130	0.4096	0.4061	0.4024	0.3985	0.3944
71	0.4526	0.4506	0.4485	0.4463	0.4439	0.4414	0.4387	0.4359	0.4329	0.4297	0.4264	0.4229	0.4193	0.4154	0.4114
72	0.4692	0.4672	0.4652	0.4630	0.4606	0.4582	0.4555	0.4528	0.4498	0.4468	0.4435	0.4401	0.4365	0.4327	0.4287
73	0.4858	0.4839	0.4819	0.4797	0.4774	0.4750	0.4725	0.4698	0.4669	0.4638	0.4606	0.4573	0.4537	0.4500	0.4461
74	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.4638
75	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.4986	0.4956	0.4923	0.4889	0.4816

Mortality: Participant UP84+1  
Beneficiary UP-4

Interest: 6%

NCEW 75% Joint Survivor Reduction Factors (Healthy)  
Benefit effective upon death of participant, if beneficiary then living: 75% of participant's benefit.

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
55	0.1769	0.1729	0.1687	0.1644	0.1601	0.1556	0.1511	0.1465	0.1418	0.1371	0.1323	0.1275	0.1226	0.1178	0.1129
56	0.1882	0.1841	0.1798	0.1754	0.1709	0.1664	0.1617	0.1569	0.1521	0.1472	0.1422	0.1372	0.1321	0.1271	0.1220
57	0.2000	0.1958	0.1914	0.1869	0.1823	0.1776	0.1728	0.1679	0.1629	0.1578	0.1527	0.1475	0.1422	0.1369	0.1316
58	0.2122	0.2079	0.2035	0.1989	0.1942	0.1894	0.1844	0.1794	0.1743	0.1690	0.1637	0.1583	0.1528	0.1473	0.1417
59	0.2250	0.2206	0.2161	0.2114	0.2066	0.2017	0.1966	0.1914	0.1862	0.1808	0.1753	0.1697	0.1640	0.1583	0.1525
60	0.2382	0.2337	0.2291	0.2244	0.2195	0.2145	0.2093	0.2040	0.1986	0.1931	0.1874	0.1817	0.1758	0.1699	0.1639
61	0.2518	0.2473	0.2427	0.2379	0.2329	0.2278	0.2225	0.2171	0.2116	0.2059	0.2001	0.1942	0.1882	0.1820	0.1758
62	0.2659	0.2614	0.2567	0.2518	0.2468	0.2416	0.2362	0.2307	0.2251	0.2193	0.2134	0.2073	0.2011	0.1948	0.1884
63	0.2803	0.2758	0.2711	0.2662	0.2611	0.2558	0.2504	0.2448	0.2391	0.2332	0.2271	0.2209	0.2145	0.2081	0.2015
64	0.2951	0.2906	0.2858	0.2809	0.2758	0.2705	0.2650	0.2593	0.2535	0.2475	0.2413	0.2350	0.2285	0.2218	0.2151
65	0.3103	0.3057	0.3009	0.2959	0.2908	0.2854	0.2799	0.2742	0.2683	0.2622	0.2559	0.2495	0.2429	0.2361	0.2292
66	0.3256	0.3210	0.3162	0.3113	0.3061	0.3007	0.2951	0.2894	0.2834	0.2773	0.2709	0.2644	0.2576	0.2507	0.2437
67	0.3412	0.3366	0.3318	0.3269	0.3217	0.3163	0.3107	0.3049	0.2989	0.2927	0.2863	0.2796	0.2728	0.2658	0.2586
68	0.3571	0.3526	0.3478	0.3428	0.3376	0.3322	0.3266	0.3208	0.3148	0.3085	0.3020	0.2954	0.2885	0.2814	0.2741
69	0.3734	0.3689	0.3641	0.3592	0.3540	0.3486	0.3430	0.3372	0.3312	0.3249	0.3184	0.3116	0.3047	0.2975	0.2901
70	0.3901	0.3856	0.3809	0.3760	0.3708	0.3655	0.3599	0.3540	0.3480	0.3417	0.3352	0.3284	0.3214	0.3142	0.3068
71	0.4071	0.4027	0.3980	0.3931	0.3880	0.3827	0.3771	0.3713	0.3653	0.3590	0.3525	0.3457	0.3387	0.3315	0.3239
72	0.4245	0.4201	0.4155	0.4106	0.4056	0.4003	0.3948	0.3890	0.3830	0.3767	0.3702	0.3635	0.3565	0.3492	0.3417
73	0.4419	0.4376	0.4330	0.4283	0.4233	0.4180	0.4126	0.4069	0.4009	0.3947	0.3882	0.3815	0.3745	0.3672	0.3597
74	0.4597	0.4555	0.4510	0.4463	0.4414	0.4362	0.4308	0.4252	0.4193	0.4131	0.4067	0.4000	0.3930	0.3858	0.3783
75	0.4776	0.4734	0.4690	0.4644	0.4595	0.4544	0.4491	0.4435	0.4377	0.4316	0.4253	0.4186	0.4117	0.4045	0.3971

Mortality: Participant UP84+1  
Beneficiary UP-4

Interest: 6%

NCEW 75% Joint Survivor Reduction Factors (Healthy)  
Benefit effective upon death of participant, if beneficiary then living: 75% of participant's benefit.

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
55	0.1081	0.1032	0.0984	0.0936	0.0889	0.0843	0.0797	0.0752	0.0709	0.0666	0.0625	0.0585	0.0547	0.0509	0.0474
56	0.1169	0.1118	0.1067	0.1016	0.0966	0.0917	0.0868	0.0821	0.0774	0.0728	0.0684	0.0641	0.0600	0.0559	0.0521
57	0.1262	0.1209	0.1155	0.1102	0.1049	0.0997	0.0945	0.0894	0.0844	0.0795	0.0748	0.0702	0.0657	0.0614	0.0572
58	0.1361	0.1305	0.1249	0.1193	0.1137	0.1082	0.1027	0.0973	0.0920	0.0868	0.0817	0.0767	0.0719	0.0673	0.0628
59	0.1467	0.1408	0.1349	0.1290	0.1231	0.1173	0.1115	0.1058	0.1001	0.0946	0.0891	0.0839	0.0787	0.0737	0.0688
60	0.1578	0.1517	0.1455	0.1394	0.1332	0.1270	0.1209	0.1149	0.1089	0.1030	0.0972	0.0915	0.0860	0.0807	0.0754
61	0.1695	0.1632	0.1568	0.1503	0.1439	0.1374	0.1310	0.1246	0.1182	0.1120	0.1059	0.0998	0.0940	0.0882	0.0826
62	0.1819	0.1753	0.1686	0.1619	0.1552	0.1484	0.1416	0.1349	0.1282	0.1216	0.1151	0.1087	0.1025	0.0964	0.0904
63	0.1947	0.1879	0.1810	0.1741	0.1670	0.1600	0.1529	0.1459	0.1389	0.1319	0.1250	0.1183	0.1116	0.1051	0.0987
64	0.2082	0.2011	0.1940	0.1868	0.1795	0.1722	0.1648	0.1574	0.1501	0.1428	0.1355	0.1284	0.1213	0.1144	0.1076
65	0.2221	0.2149	0.2075	0.2001	0.1925	0.1849	0.1773	0.1696	0.1619	0.1542	0.1466	0.1391	0.1317	0.1243	0.1171
66	0.2364	0.2290	0.2215	0.2138	0.2061	0.1982	0.1902	0.1822	0.1742	0.1662	0.1583	0.1504	0.1425	0.1348	0.1271
67	0.2512	0.2437	0.2360	0.2281	0.2201	0.2120	0.2038	0.1955	0.1871	0.1788	0.1705	0.1622	0.1540	0.1458	0.1378
68	0.2666	0.2589	0.2510	0.2429	0.2347	0.2264	0.2179	0.2094	0.2007	0.1921	0.1834	0.1748	0.1662	0.1576	0.1491
69	0.2825	0.2747	0.2667	0.2584	0.2501	0.2415	0.2328	0.2240	0.2151	0.2061	0.1971	0.1881	0.1792	0.1702	0.1613
70	0.2991	0.2911	0.2830	0.2746	0.2661	0.2573	0.2484	0.2394	0.2302	0.2209	0.2116	0.2023	0.1930	0.1836	0.1743
71	0.3162	0.3082	0.2999	0.2915	0.2828	0.2738	0.2647	0.2555	0.2461	0.2365	0.2269	0.2173	0.2076	0.1979	0.1881
72	0.3339	0.3258	0.3175	0.3089	0.3001	0.2910	0.2818	0.2723	0.2627	0.2529	0.2431	0.2331	0.2231	0.2130	0.2029
73	0.3519	0.3438	0.3354	0.3268	0.3179	0.3087	0.2993	0.2897	0.2799	0.2699	0.2598	0.2496	0.2393	0.2289	0.2184
74	0.3705	0.3624	0.3540	0.3453	0.3363	0.3271	0.3176	0.3078	0.2979	0.2877	0.2774	0.2669	0.2563	0.2456	0.2348
75	0.3893	0.3812	0.3728	0.3641	0.3551	0.3458	0.3362	0.3264	0.3163	0.3060	0.2955	0.2848	0.2740	0.2630	0.2518

Mortality: Participant UP84+1  
Beneficiary UP-4

Interest: 6%



NCEW 100% Joint Survivor Reduction Factors (Healthy)  
Benefit effective upon death of participant, if beneficiary then living: 100% of participant's benefit.

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
55	0.2775	0.2748	0.2721	0.2692	0.2661	0.2629	0.2596	0.2561	0.2524	0.2486	0.2447	0.2406	0.2364	0.2320	0.2274
56	0.2911	0.2885	0.2857	0.2828	0.2798	0.2766	0.2733	0.2698	0.2661	0.2623	0.2583	0.2542	0.2499	0.2455	0.2409
57	0.3051	0.3025	0.2998	0.2969	0.2938	0.2907	0.2873	0.2838	0.2802	0.2763	0.2724	0.2682	0.2639	0.2594	0.2548
58	0.3194	0.3168	0.3141	0.3112	0.3082	0.3051	0.3017	0.2982	0.2946	0.2908	0.2868	0.2826	0.2783	0.2738	0.2691
59	0.3341	0.3315	0.3288	0.3260	0.3230	0.3198	0.3165	0.3130	0.3094	0.3056	0.3016	0.2974	0.2931	0.2886	0.2839
60	0.3490	0.3465	0.3439	0.3410	0.3381	0.3349	0.3316	0.3282	0.3246	0.3208	0.3168	0.3126	0.3083	0.3038	0.2991
61	0.3643	0.3618	0.3592	0.3564	0.3534	0.3503	0.3471	0.3437	0.3400	0.3363	0.3323	0.3282	0.3239	0.3193	0.3146
62	0.3798	0.3773	0.3747	0.3720	0.3691	0.3660	0.3628	0.3594	0.3558	0.3521	0.3481	0.3440	0.3397	0.3352	0.3305
63	0.3954	0.3930	0.3905	0.3878	0.3849	0.3819	0.3787	0.3753	0.3718	0.3681	0.3642	0.3601	0.3558	0.3514	0.3467
64	0.4113	0.4089	0.4064	0.4037	0.4009	0.3979	0.3948	0.3915	0.3880	0.3843	0.3805	0.3764	0.3722	0.3678	0.3631
65	0.4272	0.4249	0.4224	0.4198	0.4170	0.4141	0.4110	0.4077	0.4043	0.4007	0.3969	0.3929	0.3887	0.3843	0.3797
66	0.4431	0.4408	0.4384	0.4359	0.4332	0.4303	0.4272	0.4240	0.4207	0.4171	0.4133	0.4094	0.4053	0.4009	0.3964
67	0.4591	0.4569	0.4545	0.4520	0.4493	0.4465	0.4436	0.4404	0.4371	0.4336	0.4299	0.4260	0.4219	0.4177	0.4132
68	0.4752	0.4730	0.4707	0.4683	0.4657	0.4629	0.4600	0.4569	0.4536	0.4502	0.4466	0.4428	0.4388	0.4346	0.4301
69	0.4914	0.4893	0.4871	0.4847	0.4821	0.4795	0.4766	0.4736	0.4704	0.4670	0.4635	0.4598	0.4558	0.4517	0.4473
70	N/A	N/A	N/A	N/A	0.4988	0.4962	0.4934	0.4904	0.4873	0.4840	0.4806	0.4769	0.4731	0.4690	0.4648
71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.4978	0.4942	0.4905	0.4865	0.4824
72	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*N/A: Reduction over 50% not allowed under IRS rules.

Mortality: Participant UP84+1  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 100% Joint Survivor Reduction Factors (Healthy)  
Benefit effective upon death of participant, if beneficiary then living: 100% of participant's benefit.

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
55	0.2227	0.2179	0.2129	0.2078	0.2026	0.1972	0.1918	0.1862	0.1805	0.1748	0.1689	0.1630	0.1571	0.1511	0.1451
56	0.2361	0.2312	0.2262	0.2210	0.2156	0.2102	0.2045	0.1988	0.1930	0.1871	0.1810	0.1749	0.1688	0.1625	0.1563
57	0.2500	0.2450	0.2399	0.2346	0.2292	0.2236	0.2179	0.2120	0.2060	0.1999	0.1937	0.1874	0.1810	0.1746	0.1681
58	0.2643	0.2593	0.2541	0.2487	0.2432	0.2375	0.2317	0.2257	0.2196	0.2133	0.2069	0.2005	0.1939	0.1872	0.1805
59	0.2790	0.2740	0.2687	0.2633	0.2577	0.2520	0.2460	0.2399	0.2337	0.2273	0.2208	0.2141	0.2074	0.2005	0.1935
60	0.2942	0.2891	0.2838	0.2784	0.2727	0.2669	0.2609	0.2547	0.2484	0.2419	0.2352	0.2284	0.2214	0.2144	0.2072
61	0.3097	0.3047	0.2994	0.2939	0.2882	0.2823	0.2762	0.2700	0.2635	0.2569	0.2501	0.2432	0.2361	0.2288	0.2215
62	0.3256	0.3206	0.3153	0.3098	0.3040	0.2981	0.2920	0.2857	0.2792	0.2725	0.2656	0.2585	0.2513	0.2439	0.2363
63	0.3418	0.3368	0.3315	0.3260	0.3202	0.3143	0.3081	0.3018	0.2952	0.2885	0.2815	0.2743	0.2669	0.2594	0.2517
64	0.3583	0.3532	0.3479	0.3425	0.3367	0.3308	0.3246	0.3182	0.3116	0.3048	0.2978	0.2905	0.2831	0.2754	0.2676
65	0.3749	0.3699	0.3646	0.3592	0.3535	0.3475	0.3414	0.3350	0.3284	0.3215	0.3144	0.3071	0.2996	0.2918	0.2839
66	0.3916	0.3867	0.3814	0.3760	0.3703	0.3644	0.3583	0.3519	0.3453	0.3384	0.3313	0.3239	0.3163	0.3085	0.3005
67	0.4085	0.4035	0.3984	0.3930	0.3874	0.3815	0.3754	0.3690	0.3624	0.3555	0.3484	0.3411	0.3334	0.3256	0.3175
68	0.4255	0.4206	0.4155	0.4102	0.4046	0.3988	0.3928	0.3864	0.3798	0.3730	0.3659	0.3585	0.3509	0.3430	0.3348
69	0.4428	0.4380	0.4330	0.4277	0.4222	0.4165	0.4104	0.4042	0.3976	0.3908	0.3838	0.3764	0.3688	0.3609	0.3527
70	0.4603	0.4556	0.4506	0.4455	0.4400	0.4344	0.4284	0.4222	0.4158	0.4090	0.4020	0.3947	0.3871	0.3792	0.3711
71	0.4780	0.4734	0.4685	0.4634	0.4581	0.4525	0.4467	0.4406	0.4342	0.4275	0.4206	0.4133	0.4058	0.3980	0.3898
72	0.4958	0.4913	0.4866	0.4816	0.4764	0.4709	0.4651	0.4591	0.4528	0.4463	0.4394	0.4323	0.4248	0.4170	0.4090
73	N/A	N/A	N/A	0.4997	0.4946	0.4892	0.4836	0.4777	0.4715	0.4651	0.4583	0.4513	0.4439	0.4362	0.4283
74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.4965	0.4905	0.4841	0.4775	0.4706	0.4633	0.4558	0.4479
75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.5031	0.4966	0.4898	0.4827	0.4753	0.4675

\*N/A: Reduction over 50% not allowed under IRS rules.

Mortality: Participant UP84+1  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 100% Joint Survivor Reduction Factors (Healthy)  
Benefit effective upon death of participant, if beneficiary then living: 100% of participant's benefit.

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
55	0.1391	0.1331	0.1270	0.1211	0.1152	0.1093	0.1035	0.0979	0.0923	0.0869	0.0816	0.0765	0.0716	0.0668	0.0622
56	0.1500	0.1437	0.1374	0.1311	0.1248	0.1186	0.1125	0.1065	0.1006	0.0948	0.0891	0.0837	0.0784	0.0732	0.0682
57	0.1615	0.1549	0.1483	0.1417	0.1351	0.1286	0.1221	0.1157	0.1095	0.1033	0.0973	0.0914	0.0857	0.0802	0.0748
58	0.1736	0.1668	0.1599	0.1530	0.1461	0.1392	0.1324	0.1256	0.1190	0.1124	0.1060	0.0998	0.0937	0.0877	0.0820
59	0.1864	0.1793	0.1721	0.1649	0.1577	0.1505	0.1433	0.1362	0.1292	0.1222	0.1154	0.1088	0.1023	0.0959	0.0897
60	0.1999	0.1925	0.1851	0.1776	0.1701	0.1625	0.1550	0.1475	0.1401	0.1327	0.1255	0.1185	0.1115	0.1047	0.0981
61	0.2140	0.2063	0.1986	0.1909	0.1831	0.1752	0.1673	0.1595	0.1517	0.1440	0.1363	0.1288	0.1215	0.1143	0.1072
62	0.2286	0.2208	0.2128	0.2048	0.1967	0.1885	0.1803	0.1721	0.1640	0.1559	0.1478	0.1399	0.1321	0.1245	0.1169
63	0.2438	0.2152	0.2276	0.2194	0.2110	0.2025	0.1940	0.1855	0.1769	0.1684	0.1600	0.1517	0.1435	0.1354	0.1274
64	0.2595	0.2513	0.2430	0.2345	0.2258	0.2171	0.2083	0.1994	0.1906	0.1817	0.1729	0.1641	0.1555	0.1469	0.1385
65	0.2757	0.2673	0.2588	0.2501	0.2412	0.2322	0.2232	0.2140	0.2048	0.1956	0.1864	0.1772	0.1682	0.1592	0.1502
66	0.2922	0.2837	0.2750	0.2661	0.2571	0.2479	0.2385	0.2291	0.2196	0.2100	0.2004	0.1909	0.1814	0.1720	0.1626
67	0.3091	0.3005	0.2917	0.2826	0.2734	0.2640	0.2544	0.2447	0.2349	0.2250	0.2151	0.2052	0.1953	0.1854	0.1756
68	0.3264	0.3177	0.3088	0.2996	0.2903	0.2807	0.2709	0.2609	0.2509	0.2407	0.2305	0.2202	0.2099	0.1997	0.1894
69	0.3443	0.3355	0.3265	0.3173	0.3078	0.2980	0.2880	0.2779	0.2676	0.2572	0.2466	0.2360	0.2254	0.2148	0.2041
70	0.3626	0.3538	0.3448	0.3355	0.3259	0.3160	0.3059	0.2956	0.2851	0.2744	0.2636	0.2527	0.2417	0.2307	0.2214
71	0.3814	0.3726	0.3636	0.3542	0.3445	0.3346	0.3244	0.3139	0.3032	0.2923	0.2813	0.2702	0.2589	0.2475	0.2361
72	0.4006	0.3918	0.3828	0.3734	0.3637	0.3537	0.3434	0.3329	0.3221	0.3110	0.2998	0.2884	0.2769	0.2652	0.2534
73	0.4199	0.4112	0.4022	0.3929	0.3832	0.3726	0.3629	0.3523	0.3413	0.3302	0.3188	0.3072	0.2955	0.2836	0.2714
74	0.4397	0.4311	0.4221	0.4129	0.4032	0.3932	0.3829	0.3722	0.3613	0.3500	0.3385	0.3268	0.3149	0.3027	0.2903
75	0.4594	0.4509	0.4426	0.4329	0.4233	0.4134	0.4031	0.3925	0.3815	0.3702	0.3586	0.3468	0.3348	0.3224	0.3098

Mortality: Participant UP84+1  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 50% Joint Survivor Factors (Disabled)  
Benefit effective upon death of participant, if beneficiary then living: 50% of participant's benefit.

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
25	0.2130	0.2114	0.2098	0.2081	0.2062	0.2043	0.2024	0.2003	0.1981	0.1959	0.1936	0.1912	0.1887	0.1861	0.1835
26	0.2075	0.2059	0.2043	0.2025	0.2007	0.1988	0.1968	0.1947	0.1926	0.1903	0.1880	0.1856	0.1831	0.1806	0.1779
27	0.2025	0.2009	0.1993	0.1975	0.1957	0.1938	0.1918	0.1897	0.1876	0.1853	0.1830	0.1806	0.1781	0.1755	0.1729
28	0.1984	0.1968	0.1951	0.1933	0.1915	0.1896	0.1876	0.1855	0.1833	0.1811	0.1788	0.1764	0.1739	0.1713	0.1686
29	0.1951	0.1935	0.1918	0.1900	0.1882	0.1862	0.1842	0.1821	0.1800	0.1777	0.1754	0.1729	0.1704	0.1678	0.1652
30	0.1927	0.1911	0.1894	0.1876	0.1858	0.1838	0.1818	0.1797	0.1775	0.1753	0.1729	0.1705	0.1680	0.1654	0.1627
31	0.1914	0.1898	0.1881	0.1863	0.1844	0.1825	0.1804	0.1783	0.1761	0.1738	0.1714	0.1690	0.1664	0.1638	0.1611
32	0.1911	0.1895	0.1878	0.1860	0.1841	0.1821	0.1801	0.1779	0.1757	0.1734	0.1710	0.1685	0.1660	0.1633	0.1606
33	0.1918	0.1902	0.1885	0.1866	0.1847	0.1828	0.1807	0.1785	0.1763	0.1740	0.1715	0.1690	0.1665	0.1638	0.1610
34	0.1935	0.1919	0.1901	0.1883	0.1864	0.1844	0.1823	0.1801	0.1778	0.1755	0.1730	0.1705	0.1679	0.1652	0.1624
35	0.1961	0.1945	0.1927	0.1908	0.1889	0.1869	0.1848	0.1826	0.1803	0.1779	0.1754	0.1729	0.1702	0.1675	0.1647
36	0.1995	0.1978	0.1960	0.1942	0.1922	0.1902	0.1881	0.1858	0.1835	0.1811	0.1786	0.1760	0.1734	0.1706	0.1677
37	0.2035	0.2018	0.2000	0.1982	0.1962	0.1941	0.1920	0.1897	0.1874	0.1850	0.1824	0.1798	0.1771	0.1743	0.1714
38	0.2080	0.2063	0.2045	0.2026	0.2006	0.1985	0.1964	0.1941	0.1917	0.1893	0.1867	0.1841	0.1813	0.1785	0.1756
39	0.2129	0.2111	0.2093	0.2074	0.2054	0.2033	0.2011	0.1988	0.1965	0.1940	0.1914	0.1887	0.1859	0.1831	0.1801
40	0.2181	0.2163	0.2145	0.2126	0.2106	0.2085	0.2062	0.2039	0.2015	0.1990	0.1964	0.1937	0.1909	0.1880	0.1850
41	0.2235	0.2218	0.2199	0.2180	0.2160	0.2138	0.2116	0.2093	0.2068	0.2043	0.2017	0.1989	0.1961	0.1931	0.1901
42	0.2292	0.2275	0.2256	0.2237	0.2216	0.2195	0.2172	0.2149	0.2124	0.2099	0.2072	0.2044	0.2015	0.1986	0.1955
43	0.2351	0.2333	0.2315	0.2295	0.2274	0.2253	0.2230	0.2206	0.2182	0.2156	0.2129	0.2101	0.2072	0.2042	0.2010
44	0.2412	0.2394	0.2375	0.2356	0.2335	0.2313	0.2290	0.2266	0.2241	0.2215	0.2188	0.2160	0.2131	0.2100	0.2069
45	0.2475	0.2457	0.2438	0.2418	0.2397	0.2376	0.2353	0.2329	0.2303	0.2277	0.2250	0.2221	0.2192	0.2161	0.2129
46	0.2541	0.2523	0.2504	0.2484	0.2463	0.2441	0.2418	0.2394	0.2368	0.2342	0.2314	0.2285	0.2255	0.2224	0.2192
47	0.2610	0.2592	0.2573	0.2553	0.2532	0.2510	0.2486	0.2462	0.2436	0.2410	0.2382	0.2353	0.2323	0.2291	0.2259
48	0.2681	0.2664	0.2645	0.2624	0.2603	0.2581	0.2558	0.2533	0.2508	0.2481	0.2453	0.2423	0.2393	0.2361	0.2329
49	0.2755	0.2737	0.2718	0.2698	0.2677	0.2654	0.2631	0.2606	0.2580	0.2553	0.2525	0.2496	0.2465	0.2433	0.2400
50	0.2830	0.2812	0.2793	0.2773	0.2751	0.2729	0.2705	0.2681	0.2655	0.2628	0.2599	0.2570	0.2539	0.2507	0.2473
51	0.2906	0.2888	0.2869	0.3390	0.2827	0.2805	0.2781	0.2756	0.2730	0.2703	0.2674	0.2645	0.2613	0.2581	0.2547
52	0.2982	0.2964	0.2944	0.2924	0.2903	0.2880	0.2857	0.2832	0.2806	0.2778	0.2749	0.2720	0.2688	0.2656	0.2622
53	0.3057	0.3039	0.3020	0.3000	0.2978	0.2956	0.2623	0.2907	0.2881	0.2853	0.2825	0.2794	0.2763	0.2730	0.2696
54	0.3133	0.3115	0.3095	0.3075	0.3054	0.3031	0.3007	0.2982	0.2956	0.2928	0.2900	0.2869	0.2838	0.2805	0.2771
55	0.3207	0.3189	0.3170	0.3150	0.3128	0.3106	0.3082	0.3057	0.3030	0.3003	0.2974	0.2943	0.2912	0.2879	0.2844
56	0.3280	0.3262	0.3243	0.3223	0.3201	0.3179	0.3155	0.3130	0.3103	0.3076	0.3047	0.3016	0.2984	0.2951	0.2917
57	0.3351	0.3333	0.3314	0.3293	0.3272	0.3249	0.3226	0.3200	0.3174	0.3146	0.3117	0.3087	0.3055	0.3021	0.2987
58	0.3419	0.3401	0.3381	0.3361	0.3340	0.3317	0.3293	0.3268	0.3242	0.3214	0.3185	0.3154	0.3122	0.3089	0.3054
59	0.3483	0.3465	0.3446	0.3426	0.3405	0.3382	0.3358	0.3333	0.3307	0.3279	0.3250	0.3219	0.3187	0.3153	0.3118
60	0.3545	0.3527	0.3508	0.3487	0.3466	0.3443	0.3419	0.3394	0.3368	0.3340	0.3311	0.3280	0.3248	0.3214	0.3179
61	0.3603	0.3585	0.3566	0.3546	0.3525	0.3502	0.3478	0.3453	0.3427	0.3399	0.3369	0.3339	0.3307	0.3273	0.3238
62	0.3660	0.3642	0.3623	0.3603	0.3582	0.3559	0.3535	0.3510	0.3483	0.3455	0.3426	0.3395	0.3363	0.3329	0.3294
63	0.3716	0.3698	0.3679	0.3659	0.3637	0.3615	0.3591	0.3566	0.3539	0.3511	0.3482	0.3451	0.3419	0.3385	0.3350
64	0.3773	0.3755	0.3736	0.3716	0.3694	0.3672	0.3648	0.3623	0.3596	0.3568	0.3539	0.3508	0.3476	0.3442	0.3406
65	0.3832	0.3815	0.3794	0.3776	0.3754	0.3732	0.3708	0.3683	0.3656	0.3628	0.3599	0.3568	0.3536	0.3502	0.3466

Mortality: Participant PBGC SS Disabled Males  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 50% Joint Survivor Factors (Disabled)  
Benefit effective upon death of participant, if beneficiary then living: 50% of participant's benefit.

Participant Age	Spouses Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
25	0.1807	0.1779	0.1750	0.1719	0.1689	0.1657	0.1625	0.1591	0.1557	0.1523	0.1488	0.1452	0.1415	0.1378	0.1341
26	0.1752	0.1723	0.1694	0.1664	0.1634	0.1602	0.1570	0.1537	0.1504	0.1469	0.1434	0.1399	0.1363	0.1326	0.1289
27	0.1701	0.1673	0.1644	0.1614	0.1584	0.1553	0.1520	0.1488	0.1454	0.1420	0.1386	0.1350	0.1315	0.1279	0.1242
28	0.1659	0.1631	0.1601	0.1572	0.1541	0.1510	0.1478	0.1445	0.1412	0.1378	0.1343	0.1308	0.1273	0.1237	0.1201
29	0.1624	0.1596	0.1567	0.1537	0.1506	0.1475	0.1443	0.1410	0.1377	0.1343	0.1309	0.1274	0.1238	0.1203	0.1166
30	0.1599	0.1571	0.1541	0.1511	0.1481	0.1449	0.1417	0.1384	0.1351	0.1317	0.1282	0.1247	0.1212	0.1176	0.1140
31	0.1583	0.1555	0.1525	0.1495	0.1464	0.1433	0.1400	0.1367	0.1334	0.1299	0.1265	0.1230	0.1192	0.1158	0.1122
32	0.1578	0.1549	0.1519	0.1489	0.1458	0.1426	0.1393	0.1360	0.1326	0.1292	0.1256	0.1221	0.1185	0.1149	0.1112
33	0.1582	0.1553	0.1523	0.1492	0.1460	0.1428	0.1395	0.1361	0.1327	0.1292	0.1257	0.1221	0.1185	0.1148	0.1111
34	0.1595	0.1566	0.1536	0.1504	0.1472	0.1440	0.1406	0.1372	0.1337	0.1302	0.1266	0.1230	0.1193	0.1156	0.1118
35	0.1618	0.1588	0.1557	0.1525	0.1493	0.1460	0.1426	0.1391	0.1356	0.1320	0.1284	0.1247	0.1209	0.1171	0.1133
36	0.1648	0.1617	0.1586	0.1554	0.1521	0.1487	0.1453	0.1418	0.1382	0.1345	0.1308	0.1271	0.1232	0.1194	0.1155
37	0.1684	0.1653	0.1622	0.1589	0.1556	0.1521	0.1486	0.1451	0.1414	0.1377	0.1339	0.1301	0.1262	0.1222	0.1183
38	0.1725	0.1694	0.1662	0.1629	0.1595	0.1560	0.1524	0.1488	0.1451	0.1413	0.1374	0.1335	0.1295	0.1255	0.1215
39	0.1770	0.1738	0.1706	0.1672	0.1638	0.1602	0.1566	0.1529	0.1491	0.1452	0.1413	0.1373	0.1333	0.1292	0.1250
40	0.1818	0.1786	0.1753	0.1719	0.1684	0.1648	0.1611	0.1573	0.1535	0.1495	0.1455	0.1415	0.1373	0.1331	0.1289
41	0.1869	0.1837	0.1803	0.1768	0.1733	0.1696	0.1659	0.1620	0.1581	0.1541	0.1500	0.1458	0.1416	0.1373	0.1330
42	0.1923	0.1890	0.1856	0.1821	0.1784	0.1747	0.1709	0.1670	0.1630	0.1589	0.1548	0.1505	0.1462	0.1418	0.1374
43	0.1978	0.1945	0.1910	0.1874	0.1838	0.1800	0.1761	0.1722	0.1681	0.1639	0.1597	0.1554	0.1510	0.1465	0.1420
44	0.2036	0.2002	0.1967	0.1931	0.1894	0.1855	0.1816	0.1775	0.1734	0.1692	0.1649	0.1605	0.1560	0.1514	0.1468
45	0.2099	0.2061	0.2026	0.1989	0.1952	0.1913	0.1873	0.1832	0.1790	0.1747	0.1703	0.1658	0.1612	0.1566	0.1518
46	0.2159	0.2124	0.2088	0.2051	0.2013	0.1973	0.1933	0.1891	0.1848	0.1805	0.1760	0.1714	0.1668	0.1620	0.1572
47	0.2225	0.2190	0.2154	0.2116	0.2077	0.2037	0.1996	0.1954	0.1911	0.1866	0.1821	0.1774	0.1727	0.1678	0.1629
48	0.2294	0.2259	0.2222	0.2184	0.2145	0.2105	0.2063	0.2020	0.1976	0.1931	0.1885	0.1837	0.1789	0.1740	0.1690
49	0.2366	0.2330	0.2293	0.2254	0.2215	0.2174	0.2131	0.2088	0.2043	0.1998	0.1951	0.1902	0.1853	0.1803	0.1752
50	0.2438	0.2402	0.2365	0.2326	0.2286	0.2245	0.2202	0.2158	0.2113	0.2066	0.2018	0.1970	0.1920	0.1869	0.1817
51	0.2512	0.2476	0.2438	0.2399	0.2359	0.2317	0.2273	0.2229	0.2183	0.2132	0.2088	0.2038	0.1987	0.1935	0.1883
52	0.2587	0.2550	0.2512	0.2472	0.2431	0.2389	0.2345	0.2300	0.2254	0.2206	0.2157	0.2107	0.2055	0.2003	0.1949
53	0.2661	0.2624	0.2585	0.2546	0.2504	0.2462	0.2417	0.2372	0.2325	0.2277	0.2227	0.2176	0.2124	0.2071	0.2016
54	0.2735	0.2698	0.2659	0.2619	0.2577	0.2534	0.2490	0.2444	0.2396	0.2348	0.2297	0.2246	0.2193	0.2139	0.2083
55	0.2808	0.2771	0.2732	0.2692	0.2650	0.2606	0.2561	0.2515	0.2467	0.2418	0.2367	0.2315	0.2261	0.2206	0.2150
56	0.2880	0.2843	0.2804	0.2763	0.2721	0.2677	0.2632	0.2585	0.2537	0.2487	0.2436	0.2383	0.2329	0.2273	0.2216
57	0.2950	0.2913	0.2873	0.2832	0.2849	0.2746	0.2700	0.2653	0.2604	0.2554	0.2502	0.2449	0.2394	0.2338	0.2280
58	0.3018	0.2980	0.2940	0.2899	0.2856	0.2812	0.2766	0.2718	0.2669	0.2619	0.2566	0.2512	0.2457	0.2400	0.2342
59	0.3082	0.3044	0.3004	0.2963	0.2920	0.2875	0.2829	0.2781	0.2732	0.2680	0.2628	0.2573	0.2517	0.2460	0.2401
60	0.3143	0.3104	0.3064	0.3023	0.2980	0.2935	0.2888	0.2840	0.2790	0.2739	0.2686	0.2631	0.2574	0.2516	0.2457
61	0.3201	0.3162	0.3122	0.3081	0.3037	0.2992	0.2945	0.2897	0.2847	0.2795	0.2741	0.2686	0.2629	0.2570	0.2611
62	0.3257	0.3219	0.3179	0.3137	0.3093	0.3048	0.3001	0.2952	0.2901	0.2849	0.2795	0.2739	0.2682	0.2623	0.2562
63	0.3313	0.3274	0.3234	0.3191	0.3148	0.3102	0.3055	0.3006	0.2955	0.2902	0.2848	0.2792	0.2734	0.2674	0.2613
64	0.3369	0.3330	0.3290	0.3248	0.3204	0.3158	0.3110	0.3061	0.3010	0.2957	0.2902	0.2845	0.2787	0.2727	0.2665
65	0.3429	0.3390	0.3349	0.3307	0.3263	0.3217	0.3169	0.3119	0.3068	0.3015	0.2959	0.2902	0.2843	0.2783	0.2720

Mortality: Participant PBGC SS Disabled Males  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 50% Joint Survivor Factors (Disabled)  
Benefit effective upon death of participant, if beneficiary then living: 50% of participant's benefit.

Participant Age	Spouses Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
25	0.1302	0.1264	0.1225	0.1185	0.1145	0.1105	0.1065	0.1025	0.0985	0.0945	0.0906	0.0863	0.0820	0.0776	0.0739
26	0.1252	0.1213	0.1175	0.1136	0.1098	0.1058	0.1019	0.0980	0.0941	0.0902	0.0863	0.0822	0.0779	0.0735	0.0690
27	0.1205	0.1167	0.1129	0.1091	0.1053	0.1015	0.0976	0.0938	0.0900	0.0862	0.0824	0.0787	0.0748	0.0708	0.0667
28	0.1164	0.1127	0.1089	0.1052	0.1014	0.0976	0.0938	0.0901	0.0863	0.0826	0.0789	0.0753	0.0717	0.0682	0.0646
29	0.1130	0.1093	0.1056	0.1019	0.0981	0.0944	0.0906	0.0869	0.0832	0.0796	0.0759	0.0724	0.0689	0.0654	0.0621
30	0.1103	0.1067	0.1030	0.0992	0.0955	0.0918	0.0881	0.0844	0.0807	0.0771	0.0735	0.0700	0.0665	0.0631	0.0598
31	0.1085	0.1048	0.1011	0.0974	0.0937	0.0899	0.0862	0.0825	0.0789	0.0753	0.0717	0.0682	0.0648	0.0614	0.0580
32	0.1075	0.1038	0.1001	0.0963	0.0926	0.0889	0.0851	0.0814	0.0778	0.0741	0.0706	0.0671	0.0636	0.0602	0.0569
33	0.1074	0.1036	0.0998	0.0923	0.0923	0.0885	0.0847	0.0810	0.0773	0.0736	0.0700	0.0665	0.0630	0.0596	0.0563
34	0.1080	0.1042	0.1004	0.0965	0.0927	0.0889	0.0851	0.0813	0.0774	0.0738	0.0702	0.0666	0.0631	0.0596	0.0563
35	0.1095	0.1056	0.1017	0.0978	0.0939	0.0900	0.0861	0.0822	0.0784	0.0746	0.0709	0.0673	0.0637	0.0602	0.0568
36	0.1116	0.1076	0.1036	0.0996	0.0956	0.0917	0.0877	0.0837	0.0798	0.0760	0.0722	0.0685	0.0648	0.0612	0.0577
37	0.1142	0.1102	0.1061	0.1021	0.0980	0.0939	0.0898	0.0858	0.0818	0.0778	0.0739	0.0701	0.0664	0.0627	0.0591
38	0.1174	0.1132	0.1090	0.1049	0.1007	0.0965	0.0923	0.0882	0.0841	0.0800	0.0760	0.0721	0.0683	0.0645	0.0608
39	0.1208	0.1166	0.1123	0.1080	0.1037	0.0994	0.0952	0.0909	0.0867	0.0825	0.0784	0.0744	0.0704	0.0665	0.0627
40	0.1246	0.1202	0.1159	0.1115	0.1071	0.1027	0.0983	0.0939	0.0896	0.0853	0.0810	0.0769	0.0728	0.0688	0.0649
41	0.1286	0.1242	0.1197	0.1152	0.1107	0.1062	0.1016	0.0972	0.0927	0.0883	0.0839	0.0796	0.0754	0.0713	0.0672
42	0.1329	0.1284	0.1238	0.1192	0.1145	0.1099	0.1053	0.1006	0.0960	0.0915	0.0870	0.0826	0.0782	0.0739	0.0697
43	0.1374	0.1327	0.1280	0.1233	0.1186	0.1138	0.1090	0.1043	0.0995	0.0949	0.0902	0.0857	0.0812	0.0768	0.0724
44	0.1421	0.1373	0.1325	0.1277	0.1228	0.1179	0.1130	0.1082	0.1033	0.0985	0.0937	0.0890	0.0843	0.0798	0.0753
45	0.1470	0.1422	0.1373	0.1323	0.1273	0.1223	0.1173	0.1122	0.1072	0.1023	0.0973	0.0925	0.0877	0.0830	0.0783
46	0.1523	0.1473	0.1423	0.1372	0.1321	0.1270	0.1218	0.1166	0.1115	0.1064	0.1013	0.0963	0.0913	0.0865	0.0817
47	0.1579	0.1528	0.1477	0.1425	0.1373	0.1320	0.1267	0.1214	0.1161	0.1108	0.1056	0.1004	0.0953	0.0903	0.0853
48	0.1639	0.1182	0.1534	0.1481	0.1427	0.1373	0.1319	0.1264	0.1210	0.1156	0.1102	0.1048	0.0996	0.0944	0.0892
49	0.1700	0.1647	0.1593	0.1539	0.1484	0.1429	0.1373	0.1317	0.1261	0.1205	0.1150	0.1095	0.1041	0.0987	0.0933
50	0.1764	0.1710	0.1655	0.1599	0.1543	0.1486	0.1429	0.1372	0.1314	0.1257	0.1200	0.1143	0.1087	0.1032	0.0977
51	0.1829	0.1774	0.1718	0.1661	0.1603	0.1545	0.1487	0.1428	0.1369	0.1310	0.1252	0.1194	0.1136	0.1079	0.1022
52	0.1894	0.1838	0.1781	0.1723	0.1665	0.1605	0.1546	0.1486	0.1425	0.1365	0.1305	0.1245	0.1186	0.1127	0.1068
53	0.1960	0.1895	0.1845	0.1786	0.1726	0.1666	0.1605	0.1543	0.1482	0.1420	0.1358	0.1297	0.1236	0.1175	0.1115
54	0.2027	0.1969	0.1910	0.1850	0.1885	0.1727	0.1665	0.1602	0.1539	0.1476	0.1413	0.1350	0.1287	0.1225	0.1163
55	0.2093	0.2034	0.1974	0.1913	0.1851	0.1788	0.1725	0.1661	0.1596	0.1532	0.1467	0.1403	0.1339	0.1275	0.1211
56	0.2158	0.2098	0.2037	0.1975	0.1912	0.1849	0.1784	0.1719	0.1653	0.1587	0.1521	0.1455	0.1390	0.1324	0.1259
57	0.2221	0.2161	0.2099	0.2036	0.1972	0.1907	0.1841	0.1775	0.1708	0.1641	0.1574	0.1507	0.1440	0.1373	0.1306
58	0.2282	0.2221	0.2158	0.2095	0.2030	0.1964	0.1897	0.1829	0.1761	0.1693	0.1624	0.1556	0.1487	0.1419	0.1351
59	0.2341	0.2279	0.2215	0.2151	0.2085	0.2018	0.1950	0.1881	0.1812	0.1742	0.1673	0.1603	0.1533	0.1464	0.1394
60	0.2396	0.2333	0.2269	0.2203	0.2137	0.2069	0.2000	0.1930	0.1860	0.1789	0.1718	0.1647	0.1576	0.1505	0.1434
61	0.2448	0.2385	0.2320	0.2254	0.2186	0.2117	0.2047	0.1977	0.1905	0.1833	0.1761	0.1689	0.1617	0.1545	0.1472
62	0.2500	0.2435	0.2370	0.2303	0.2234	0.2164	0.2093	0.2022	0.1949	0.1876	0.1803	0.1729	0.1656	0.1582	0.1509
63	0.2550	0.2485	0.2418	0.2350	0.2281	0.2210	0.2138	0.2065	0.1992	0.1918	0.1843	0.1768	0.1694	0.1619	0.1544
64	0.2601	0.2535	0.2468	0.2399	0.2329	0.2257	0.2185	0.2111	0.2036	0.1960	0.1885	0.1809	0.1733	0.1656	0.1580
65	0.2656	0.2589	0.2521	0.2452	0.2381	0.2308	0.2234	0.2159	0.2083	0.2006	0.1929	0.1852	0.1774	0.1697	0.1619

Mortality: Participant PBGC SS Disabled Males  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 66.67% Joint Survivor Factors (Disabled)  
Benefit effective upon death of participant, if beneficiary then living: 66.67% of participant's benefit.

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
25	0.2652	0.2634	0.2615	0.2594	0.2573	0.2551	0.2528	0.2504	0.2478	0.2452	0.2425	0.2396	0.2367	0.2337	0.2305
26	0.2588	0.2569	0.2550	0.2530	0.2508	0.2486	0.2463	0.2438	0.2413	0.2387	0.2359	0.2331	0.2301	0.2271	0.2239
27	0.2530	0.2511	0.2492	0.2471	0.2450	0.2427	0.2404	0.2379	0.2354	0.2327	0.2300	0.2271	0.2242	0.2211	0.2180
28	0.2481	0.2462	0.2442	0.2422	0.2400	0.2378	0.2354	0.2329	0.2304	0.2277	0.2250	0.2221	0.2191	0.2160	0.2129
29	0.2442	0.2423	0.2403	0.2383	0.2361	0.2338	0.2314	0.2290	0.2264	0.2237	0.2209	0.2180	0.2150	0.2119	0.2088
30	0.2415	0.2396	0.2376	0.2355	0.2333	0.2310	0.2286	0.2261	0.2235	0.2208	0.2180	0.2151	0.2121	0.2090	0.2057
31	0.2399	0.2380	0.2360	0.2339	0.2316	0.2293	0.2269	0.2244	0.2218	0.2191	0.2162	0.2133	0.2103	0.2071	0.2039
32	0.2396	0.2377	0.2356	0.2335	0.2313	0.2289	0.2265	0.2240	0.2213	0.2186	0.2157	0.2128	0.2097	0.2065	0.2033
33	0.2404	0.2385	0.2364	0.2343	0.2320	0.2297	0.2272	0.2247	0.2220	0.2192	0.2164	0.2134	0.2103	0.2071	0.2038
34	0.2424	0.2405	0.2384	0.2362	0.2340	0.2316	0.2291	0.2266	0.2239	0.2211	0.2182	0.2151	0.2120	0.2088	0.2054
35	0.2455	0.2435	0.2414	0.2392	0.2370	0.2346	0.2321	0.2295	0.2268	0.2239	0.2210	0.2180	0.2148	0.2116	0.2082
36	0.2494	0.2474	0.2454	0.2432	0.2409	0.2385	0.2360	0.2333	0.2306	0.2277	0.2248	0.2217	0.2185	0.2152	0.2118
37	0.2541	0.2521	0.2501	0.2478	0.2455	0.2431	0.2406	0.2379	0.2352	0.2323	0.2293	0.2262	0.2230	0.2197	0.2162
38	0.2594	0.2574	0.2553	0.2531	0.2507	0.2483	0.2458	0.2431	0.2403	0.2374	0.2344	0.2313	0.2280	0.2246	0.2212
39	0.2650	0.2630	0.2609	0.2587	0.2563	0.2539	0.2513	0.2487	0.2458	0.2429	0.2399	0.2367	0.2335	0.2300	0.2265
40	0.2711	0.2691	0.2669	0.2647	0.2624	0.2599	0.2573	0.2546	0.2518	0.2488	0.2458	0.2426	0.2393	0.2359	0.2323
41	0.2774	0.2753	0.2732	0.2710	0.2686	0.2661	0.2636	0.2608	0.2580	0.2550	0.2520	0.2487	0.2454	0.2419	0.2383
42	0.2839	0.2819	0.2798	0.2775	0.2752	0.2727	0.2701	0.2674	0.2645	0.2615	0.2584	0.2552	0.2518	0.2483	0.2447
43	0.2907	0.2887	0.2865	0.2843	0.2819	0.2794	0.2768	0.2740	0.2712	0.2682	0.2651	0.2618	0.2584	0.2549	0.2512
44	0.2976	0.2956	0.2935	0.2912	0.2888	0.2863	0.2837	0.2810	0.2781	0.2751	0.2719	0.2687	0.2653	0.2617	0.2580
45	0.3048	0.3028	0.3007	0.2984	0.2960	0.2935	0.2909	0.2881	0.2852	0.2822	0.2790	0.2758	0.2723	0.2688	0.2650
46	0.3123	0.3103	0.3081	0.3059	0.3035	0.3010	0.2983	0.2956	0.2927	0.2896	0.2865	0.2832	0.2797	0.2761	0.2724
47	0.3201	0.3181	0.3159	0.3137	0.3113	0.3088	0.3062	0.3034	0.3005	0.2974	0.2942	0.2909	0.2875	0.2839	0.2801
48	0.3282	0.3262	0.3240	0.3218	0.3194	0.3169	0.3143	0.3115	0.3086	0.3055	0.3023	0.2990	0.2955	0.2919	0.2881
49	0.3364	0.3344	0.3323	0.3300	0.3277	0.3251	0.3225	0.3197	0.3168	0.3138	0.3106	0.3072	0.3037	0.3001	0.2963
50	0.3448	0.3428	0.3407	0.3384	0.3360	0.3335	0.3309	0.3281	0.3252	0.3221	0.3189	0.3156	0.3121	0.3085	0.3047
51	0.3532	0.3512	0.3491	0.3469	0.3445	0.3420	0.3394	0.3366	0.3337	0.3306	0.3274	0.3241	0.3206	0.3169	0.3131
52	0.3616	0.3596	0.3575	0.3553	0.3529	0.3504	0.3478	0.3450	0.3421	0.3390	0.3358	0.3325	0.3290	0.3253	0.3215
53	0.3699	0.3680	0.3658	0.3636	0.3613	0.3588	0.3216	0.3534	0.3505	0.3474	0.3442	0.3409	0.3374	0.3337	0.3299
54	0.3782	0.3762	0.3741	0.3719	0.3696	0.3671	0.3645	0.3617	0.3588	0.3557	0.3525	0.3492	0.3457	0.3420	0.3382
55	0.3863	0.3844	0.3823	0.3801	0.3777	0.3752	0.3726	0.3699	0.3670	0.3639	0.3607	0.3574	0.3539	0.3502	0.3464
56	0.3943	0.3923	0.3902	0.3880	0.3857	0.3832	0.3806	0.3779	0.3750	0.3720	0.3688	0.3654	0.3619	0.3583	0.3544
57	0.4019	0.4000	0.3979	0.3957	0.3934	0.3909	0.3883	0.3856	0.3827	0.3797	0.3765	0.3732	0.3697	0.3660	0.3622
58	0.4092	0.4073	0.4052	0.4030	0.4007	0.3983	0.3957	0.3930	0.3901	0.3871	0.3839	0.3806	0.3771	0.3734	0.3696
59	0.4162	0.4142	0.4122	0.4100	0.4077	0.4053	0.4027	0.4000	0.3971	0.3941	0.3909	0.3876	0.3841	0.3805	0.3767
60	0.4227	0.4208	0.4187	0.4166	0.4143	0.4118	0.4093	0.4066	0.4037	0.4007	0.3976	0.3942	0.3908	0.3871	0.3833
61	0.4289	0.4270	0.4250	0.4228	0.4206	0.4182	0.4156	0.4129	0.4100	0.4071	0.4039	0.4006	0.3971	0.3935	0.3897
62	0.4350	0.4331	0.4310	0.4289	0.4266	0.4242	0.4217	0.4190	0.4161	0.4132	0.4100	0.4067	0.4032	0.3996	0.3958
63	0.4408	0.4390	0.4369	0.4348	0.4325	0.4301	0.4276	0.4249	0.4221	0.4191	0.4160	0.4127	0.4092	0.4056	0.4018
64	0.4468	0.4450	0.4430	0.4408	0.4386	0.4362	0.4337	0.4310	0.4282	0.4252	0.4221	0.4188	0.4153	0.4117	0.4079
65	0.4531	0.4513	0.4491	0.4471	0.4449	0.4425	0.4400	0.4374	0.4345	0.4316	0.4285	0.4252	0.4217	0.4181	0.4143

Mortality: Participant PBGC SS Disabled Males  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 66.67% Joint Survivor Factors (Disabled)  
Benefit effective upon death of participant, if beneficiary then living: 66.67% of participant's benefit.

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
25	0.2273	0.2239	0.2204	0.2168	0.2132	0.2094	0.2055	0.2015	0.1974	0.1932	0.1890	0.1846	0.1802	0.1757	0.1711
26	0.2207	0.2173	0.2138	0.2103	0.2066	0.2028	0.1989	0.1950	0.1909	0.1868	0.1825	0.1782	0.1738	0.1693	0.1648
27	0.2147	0.2113	0.2079	0.2043	0.2006	0.1968	0.1930	0.1890	0.1849	0.1808	0.1766	0.1723	0.1679	0.1635	0.1590
28	0.2096	0.2062	0.2027	0.1991	0.1955	0.1917	0.1878	0.1838	0.1798	0.1757	0.1715	0.1672	0.1628	0.1584	0.1539
29	0.2055	0.2021	0.1986	0.1950	0.1913	0.1875	0.1836	0.1796	0.1756	0.1714	0.1672	0.1629	0.1586	0.1542	0.1497
30	0.2024	0.1990	0.1955	0.1919	0.1881	0.1843	0.1804	0.1764	0.1724	0.1682	0.1640	0.1597	0.1553	0.1509	0.1464
31	0.2005	0.1971	0.1935	0.1899	0.1861	0.1823	0.1784	0.1743	0.1703	0.1661	0.1618	0.1575	0.1529	0.1487	0.1442
32	0.1999	0.1964	0.1928	0.1891	0.1854	0.1815	0.1775	0.1735	0.1693	0.1651	0.1608	0.1564	0.1520	0.1475	0.1430
33	0.2004	0.1968	0.1932	0.1895	0.1857	0.1818	0.1777	0.1736	0.1694	0.1652	0.1608	0.1564	0.1520	0.1474	0.1428
34	0.2020	0.1984	0.1948	0.1910	0.1871	0.1832	0.1791	0.1749	0.1707	0.1664	0.1620	0.1575	0.1530	0.1484	0.1437
35	0.2047	0.2011	0.1974	0.1936	0.1896	0.1856	0.1815	0.1773	0.1730	0.1686	0.1641	0.1596	0.1550	0.1503	0.1456
36	0.2083	0.2046	0.2009	0.1970	0.1930	0.1890	0.1848	0.1805	0.1761	0.1717	0.1671	0.1625	0.1578	0.1531	0.1483
37	0.2126	0.2090	0.2051	0.2012	0.1972	0.1931	0.1888	0.1845	0.1801	0.1755	0.1709	0.1662	0.1614	0.1566	0.1517
38	0.2175	0.2138	0.2100	0.2060	0.2019	0.1977	0.1934	0.1890	0.1845	0.1799	0.1752	0.1704	0.1656	0.1606	0.1556
39	0.2229	0.2191	0.2152	0.2112	0.2071	0.2028	0.1984	0.1940	0.1894	0.1847	0.1799	0.1751	0.1701	0.1651	0.1600
40	0.2286	0.2248	0.2209	0.2168	0.2126	0.2083	0.2039	0.1993	0.1947	0.1899	0.1851	0.1801	0.1751	0.1700	0.1648
41	0.2346	0.2308	0.2268	0.2227	0.2184	0.2141	0.2096	0.2050	0.2003	0.1954	0.1905	0.1855	0.1803	0.1751	0.1698
42	0.2409	0.2371	0.2330	0.2289	0.2246	0.2201	0.2156	0.2109	0.2062	0.2013	0.1962	0.1911	0.1859	0.1806	0.1752
43	0.2474	0.2435	0.2394	0.2352	0.2309	0.2264	0.2218	0.2171	0.2122	0.2073	0.2022	0.1970	0.1917	0.1863	0.1808
44	0.2542	0.2502	0.2461	0.2419	0.2375	0.2330	0.2283	0.2235	0.2186	0.2135	0.2084	0.2031	0.1977	0.1922	0.1866
45	0.2615	0.2572	0.2530	0.2488	0.2443	0.2397	0.2350	0.2302	0.2252	0.2201	0.2148	0.2095	0.2040	0.1984	0.1927
46	0.2685	0.2645	0.2603	0.2560	0.2515	0.2469	0.2421	0.2372	0.2322	0.2270	0.2217	0.2162	0.2107	0.2050	0.1992
47	0.2762	0.2721	0.2679	0.2636	0.2591	0.2544	0.2496	0.2446	0.2395	0.2343	0.2289	0.2234	0.2177	0.2119	0.2061
48	0.2842	0.2801	0.2759	0.2715	0.2669	0.2622	0.2574	0.2524	0.2472	0.2419	0.2364	0.2308	0.2251	0.2193	0.2133
49	0.2924	0.2883	0.2840	0.2796	0.2750	0.2702	0.2653	0.2603	0.2551	0.2497	0.2442	0.2385	0.2327	0.2268	0.2207
50	0.3007	0.2966	0.2923	0.2878	0.2832	0.2785	0.2735	0.2684	0.2632	0.2577	0.2522	0.2464	0.2406	0.2346	0.2284
51	0.3091	0.3050	0.3007	0.2962	0.2916	0.2868	0.2818	0.2766	0.2713	0.2655	0.2602	0.2545	0.2485	0.2424	0.2362
52	0.3175	0.3134	0.3090	0.3046	0.2999	0.2951	0.2901	0.2849	0.2795	0.2740	0.2683	0.2625	0.2565	0.2503	0.2440
53	0.3259	0.3217	0.3174	0.3129	0.3082	0.3033	0.2983	0.2931	0.2877	0.2822	0.2764	0.2705	0.2645	0.2583	0.2519
54	0.3342	0.3300	0.3257	0.3212	0.3165	0.3116	0.3065	0.3013	0.2959	0.2903	0.2845	0.2786	0.2725	0.2662	0.2597
55	0.3424	0.3382	0.3339	0.3293	0.3246	0.3197	0.3147	0.3094	0.3040	0.2983	0.2925	0.2865	0.2804	0.2740	0.2675
56	0.3504	0.3463	0.3419	0.3374	0.3326	0.3277	0.3226	0.3173	0.3119	0.3062	0.3004	0.2943	0.2881	0.2817	0.2752
57	0.3582	0.3540	0.3496	0.3451	0.3409	0.3354	0.3303	0.3250	0.3195	0.3138	0.3080	0.3019	0.2956	0.2892	0.2826
58	0.3656	0.3614	0.3570	0.3525	0.3477	0.3428	0.3377	0.3323	0.3268	0.3211	0.3152	0.3091	0.3028	0.2963	0.2897
59	0.3727	0.3685	0.3641	0.3595	0.3548	0.3498	0.3447	0.3394	0.3338	0.3281	0.3222	0.3160	0.3097	0.3032	0.2964
60	0.3793	0.3751	0.3707	0.3662	0.3614	0.3565	0.3513	0.3459	0.3404	0.3346	0.3287	0.3225	0.3161	0.3096	0.3028
61	0.3856	0.3815	0.3771	0.3725	0.3678	0.3628	0.3576	0.3522	0.3467	0.3409	0.3349	0.3287	0.3223	0.3157	0.3202
62	0.3918	0.3876	0.3832	0.3786	0.3739	0.3689	0.3637	0.3583	0.3528	0.3469	0.3409	0.3347	0.3282	0.3216	0.3147
63	0.3978	0.3936	0.3892	0.3846	0.3799	0.3749	0.3697	0.3643	0.3587	0.3528	0.3468	0.3405	0.3341	0.3274	0.3205
64	0.4039	0.3997	0.3953	0.3907	0.3860	0.3810	0.3758	0.3704	0.3647	0.3589	0.3528	0.3465	0.3400	0.3333	0.3263
65	0.4103	0.4061	0.4018	0.3972	0.3924	0.3874	0.3822	0.3768	0.3711	0.3653	0.3592	0.3529	0.3463	0.3395	0.3325

Mortality: Participant PBGC SS Disabled Males  
Beneficiary UP84-4

Interest Rate: 6%



NCEW 66.67% Joint Survivor Factors (Disabled)  
Benefit effective upon death of participant, if beneficiary then living: 66.67% of participant's benefit.

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
25	0.1664	0.1617	0.1569	0.1520	0.1471	0.1422	0.1372	0.1322	0.1271	0.1221	0.1172	0.1119	0.1064	0.1009	0.0962
26	0.1602	0.1555	0.1508	0.1460	0.1412	0.1363	0.1314	0.1265	0.1216	0.1167	0.1119	0.1067	0.1013	0.0957	0.0900
27	0.1544	0.1498	0.1451	0.1404	0.1357	0.1309	0.1261	0.1213	0.1165	0.1117	0.1069	0.1022	0.0973	0.0922	0.0870
28	0.1494	0.1448	0.1402	0.1355	0.1308	0.1261	0.1213	0.1166	0.1119	0.1072	0.1025	0.0979	0.0934	0.0890	0.0843
29	0.1452	0.1406	0.1360	0.1314	0.1267	0.1220	0.1173	0.1126	0.1080	0.1033	0.0987	0.0942	0.0898	0.0853	0.0811
30	0.1419	0.1373	0.1327	0.1281	0.1234	0.1188	0.1141	0.1094	0.1048	0.1002	0.0957	0.0912	0.0868	0.0824	0.0781
31	0.1396	0.1350	0.1304	0.1258	0.1211	0.1164	0.1118	0.1071	0.1025	0.0979	0.0934	0.0889	0.0845	0.0802	0.0759
32	0.1384	0.1338	0.1291	0.1245	0.1198	0.1151	0.1104	0.1057	0.1011	0.0965	0.0919	0.0875	0.0831	0.0787	0.0745
33	0.1382	0.1335	0.1288	0.1193	0.1194	0.1146	0.1099	0.1051	0.1005	0.0958	0.0913	0.0868	0.0823	0.0780	0.0737
34	0.1390	0.1343	0.1295	0.1247	0.1199	0.1151	0.1103	0.1055	0.0962	0.0961	0.0914	0.0869	0.0824	0.0780	0.0736
35	0.1408	0.1360	0.1311	0.1262	0.1214	0.1164	0.1116	0.1067	0.1019	0.0971	0.0924	0.0877	0.0832	0.0787	0.0743
36	0.1434	0.1385	0.1335	0.1286	0.1236	0.1186	0.1136	0.1086	0.1037	0.0988	0.0940	0.0893	0.0846	0.0800	0.0755
37	0.1467	0.1417	0.1367	0.1316	0.1265	0.1214	0.1163	0.1112	0.1062	0.1012	0.0962	0.0914	0.0866	0.0819	0.0773
38	0.1506	0.1455	0.1403	0.1351	0.1299	0.1247	0.1194	0.1142	0.1091	0.1039	0.0989	0.0939	0.0890	0.0842	0.0794
39	0.1548	0.1496	0.1443	0.1390	0.1337	0.1283	0.1230	0.1177	0.1123	0.1071	0.1019	0.0968	0.0917	0.0868	0.0819
40	0.1595	0.1542	0.1488	0.1433	0.1379	0.1324	0.1269	0.1214	0.1160	0.1106	0.1052	0.1000	0.0948	0.0897	0.0846
41	0.1644	0.1590	0.1535	0.1479	0.1423	0.1367	0.1311	0.1255	0.1199	0.1143	0.1088	0.1034	0.0981	0.0928	0.0876
42	0.1697	0.1641	0.1585	0.1528	0.1471	0.1414	0.1356	0.1298	0.1241	0.1184	0.1127	0.1071	0.1016	0.0962	0.0909
43	0.1752	0.1695	0.1636	0.1579	0.1521	0.1462	0.1403	0.1344	0.1285	0.1226	0.1168	0.1111	0.1054	0.0998	0.0943
44	0.1809	0.1751	0.1692	0.1633	0.1573	0.1513	0.1453	0.1392	0.1331	0.1271	0.1211	0.1152	0.1094	0.1036	0.0979
45	0.1869	0.1810	0.1750	0.1690	0.1629	0.1567	0.1505	0.1443	0.1381	0.1319	0.1257	0.1196	0.1136	0.1077	0.1018
46	0.1933	0.1873	0.1812	0.1750	0.1687	0.1624	0.1561	0.1497	0.1433	0.1370	0.1307	0.1244	0.1182	0.1121	0.1060
47	0.2000	0.1939	0.1877	0.1814	0.1750	0.1686	0.1621	0.1555	0.1490	0.1425	0.1360	0.1296	0.1232	0.1169	0.1106
48	0.2072	0.1517	0.1946	0.1882	0.1817	0.1751	0.1684	0.1618	0.1551	0.1484	0.1417	0.1351	0.1285	0.1220	0.1155
49	0.2145	0.2082	0.2017	0.1952	0.1886	0.1818	0.1750	0.1682	0.1614	0.1545	0.1476	0.1408	0.1341	0.1274	0.1207
50	0.2221	0.2157	0.2091	0.2025	0.1957	0.1888	0.1819	0.1749	0.1679	0.1609	0.1539	0.1469	0.1399	0.1330	0.1261
51	0.2298	0.2233	0.2166	0.2098	0.2030	0.1960	0.1889	0.1818	0.1746	0.1674	0.1602	0.1531	0.1460	0.1389	0.1318
52	0.2376	0.2309	0.2242	0.2173	0.2103	0.2032	0.1960	0.1887	0.1814	0.1741	0.1667	0.1594	0.1521	0.1448	0.1375
53	0.2453	0.2377	0.2318	0.2248	0.2177	0.2105	0.2031	0.1957	0.1883	0.1808	0.1733	0.1658	0.1583	0.1508	0.1434
54	0.2531	0.2463	0.2394	0.2323	0.2365	0.2178	0.2103	0.2028	0.1952	0.1875	0.1799	0.1722	0.1646	0.1569	0.1493
55	0.2608	0.2540	0.2469	0.2398	0.2325	0.2250	0.2175	0.2098	0.2021	0.1943	0.1865	0.1787	0.1709	0.1631	0.1552
56	0.2684	0.2615	0.2544	0.2471	0.2397	0.2322	0.2245	0.2167	0.2089	0.2010	0.1930	0.1851	0.1771	0.1691	0.1611
57	0.2758	0.2688	0.2616	0.2542	0.2468	0.2391	0.2313	0.2235	0.2155	0.2075	0.1994	0.1913	0.1832	0.1750	0.1669
58	0.2828	0.2757	0.2685	0.2611	0.2535	0.2457	0.2379	0.2299	0.2218	0.2136	0.2054	0.1972	0.1890	0.1807	0.1724
59	0.2895	0.2824	0.2751	0.2676	0.2599	0.2521	0.2441	0.2360	0.2279	0.2196	0.2112	0.2029	0.1945	0.1861	0.1776
60	0.2958	0.2886	0.2812	0.2737	0.2659	0.2580	0.2500	0.2418	0.2335	0.2251	0.2167	0.2082	0.1997	0.1911	0.1825
61	0.3018	0.2946	0.2872	0.2795	0.2717	0.2637	0.2556	0.2473	0.2389	0.2304	0.2218	0.2132	0.2046	0.1959	0.1871
62	0.3076	0.3003	0.2928	0.2851	0.2772	0.2692	0.2609	0.2525	0.2440	0.2354	0.2267	0.2180	0.2092	0.2004	0.1915
63	0.3133	0.3060	0.2984	0.2906	0.2826	0.2745	0.2661	0.2577	0.2490	0.2403	0.2315	0.2227	0.2138	0.2048	0.1958
64	0.3191	0.3117	0.3041	0.2962	0.2882	0.2799	0.2715	0.2629	0.2542	0.2454	0.2364	0.2275	0.2184	0.2093	0.2001
65	0.3253	0.3178	0.3101	0.3022	0.2941	0.2857	0.2772	0.2685	0.2597	0.2507	0.2417	0.2326	0.2234	0.2141	0.2048

Mortality: Participant PBGC SS Disabled Males  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 75% Joint Survivor Reduction Factors (Disabled).  
Benefit effective upon death of participant if beneficiary thenliving: 75% of participant's benefit.

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
25	0.2888	0.2868	0.2848	0.2827	0.2804	0.2781	0.2757	0.2731	0.2704	0.2676	0.2648	0.2618	0.2586	0.2554	0.2521
26	0.2820	0.2800	0.2780	0.2758	0.2736	0.2712	0.2688	0.2662	0.2635	0.2607	0.2578	0.2548	0.2517	0.2484	0.2451
27	0.2759	0.2739	0.2718	0.2697	0.2674	0.2650	0.2625	0.2599	0.2572	0.2544	0.2515	0.2485	0.2453	0.2421	0.2387
28	0.2707	0.2687	0.2666	0.2644	0.2622	0.2598	0.2573	0.2546	0.2519	0.2491	0.2461	0.2431	0.2399	0.2366	0.2333
29	0.2666	0.2646	0.2625	0.2603	0.2580	0.2556	0.2530	0.2504	0.2477	0.2448	0.2418	0.2388	0.2356	0.2323	0.2289
30	0.2637	0.2617	0.2595	0.2573	0.2550	0.2526	0.2500	0.2474	0.2446	0.2417	0.2387	0.2356	0.2324	0.2291	0.2256
31	0.2620	0.2600	0.2579	0.2556	0.2533	0.2508	0.2482	0.2456	0.2428	0.2399	0.2369	0.2337	0.2305	0.2271	0.2237
32	0.2617	0.2596	0.2575	0.2552	0.2529	0.2504	0.2478	0.2451	0.2423	0.2394	0.2363	0.2332	0.2299	0.2265	0.2230
33	0.2626	0.2605	0.2583	0.2561	0.2537	0.2512	0.2486	0.2458	0.2430	0.2400	0.2370	0.2338	0.2305	0.2271	0.2235
34	0.2647	0.2626	0.2604	0.2581	0.2557	0.2532	0.2506	0.2478	0.2450	0.2420	0.2389	0.2357	0.2324	0.2289	0.2253
35	0.2679	0.2658	0.2636	0.2613	0.2589	0.2564	0.2537	0.2510	0.2481	0.2451	0.2419	0.2387	0.2353	0.2319	0.2282
36	0.2721	0.2700	0.2678	0.2655	0.2631	0.2605	0.2578	0.2551	0.2521	0.2491	0.2460	0.2427	0.2393	0.2358	0.2321
37	0.2771	0.2750	0.2728	0.2704	0.2680	0.2654	0.2628	0.2599	0.2570	0.2540	0.2508	0.2475	0.2441	0.2405	0.2368
38	0.2826	0.2805	0.2783	0.2760	0.2735	0.2709	0.2682	0.2654	0.2625	0.2594	0.2562	0.2529	0.2494	0.2458	0.2421
39	0.2886	0.2865	0.2842	0.2819	0.2794	0.2768	0.2741	0.2713	0.2683	0.2652	0.2620	0.2587	0.2552	0.2516	0.2478
40	0.2949	0.2928	0.2906	0.2882	0.2858	0.2832	0.2804	0.2776	0.2746	0.2715	0.2683	0.2649	0.2614	0.2577	0.2539
41	0.3016	0.2994	0.2972	0.2948	0.2924	0.2898	0.2870	0.2842	0.2812	0.2780	0.2748	0.2714	0.2679	0.2642	0.2604
42	0.3085	0.3064	0.3041	0.3018	0.2993	0.2967	0.2939	0.2910	0.2880	0.2849	0.2816	0.2782	0.2746	0.2710	0.2671
43	0.3155	0.3155	0.3155	0.3155	0.3155	0.3155	0.3155	0.3155	0.3155	0.3155	0.3155	0.3155	0.3155	0.3155	0.2740
44	0.3228	0.3207	0.3185	0.3161	0.3136	0.3110	0.3082	0.3054	0.3023	0.2992	0.2959	0.2924	0.2888	0.2851	0.2812
45	0.3303	0.3282	0.3260	0.3236	0.3211	0.3185	0.3157	0.3129	0.3098	0.3066	0.3033	0.2999	0.2963	0.2925	0.2886
46	0.3381	0.3360	0.3338	0.3314	0.3289	0.3263	0.3236	0.3207	0.3176	0.3144	0.3111	0.3077	0.3040	0.3003	0.2963
47	0.3463	0.3442	0.3419	0.3396	0.3371	0.3345	0.3317	0.3288	0.3258	0.3226	0.3193	0.3158	0.3122	0.3084	0.3044
48	0.3547	0.3526	0.3504	0.3480	0.3455	0.3429	0.3402	0.3373	0.3342	0.3310	0.3277	0.3242	0.3206	0.3168	0.3129
49	0.3632	0.3611	0.3589	0.3566	0.3541	0.3515	0.3487	0.3459	0.3428	0.3396	0.3363	0.3328	0.3292	0.3254	0.3214
50	0.3719	0.3698	0.3676	0.3653	0.3628	0.3602	0.3575	0.3546	0.3516	0.3484	0.3450	0.3416	0.3379	0.3341	0.3302
51	0.3806	0.3785	0.3763	0.3740	0.3715	0.3689	0.3662	0.3634	0.3603	0.3572	0.3538	0.3504	0.3467	0.3429	0.3389
52	0.3892	0.3872	0.3850	0.3827	0.3802	0.3777	0.3749	0.3721	0.3691	0.3659	0.3626	0.3591	0.3555	0.3517	0.3477
53	0.3978	0.3957	0.3936	0.3913	0.3888	0.3863	0.3836	0.3807	0.3777	0.3746	0.3712	0.3678	0.3642	0.3604	0.3564
54	0.4063	0.4042	0.4021	0.3998	0.3974	0.3948	0.3921	0.3893	0.3863	0.3832	0.3799	0.3764	0.3728	0.3690	0.3650
55	0.4146	0.4126	0.4104	0.4082	0.4058	0.4032	0.4005	0.3977	0.3947	0.3916	0.3883	0.3849	0.3813	0.3775	0.3735
56	0.4227	0.4207	0.4186	0.4163	0.4139	0.4114	0.4087	0.4059	0.4030	0.3998	0.3966	0.3931	0.3895	0.3858	0.3818
57	0.4305	0.4285	0.4264	0.4242	0.4218	0.4193	0.4166	0.4138	0.4109	0.4078	0.4045	0.4011	0.3975	0.3937	0.3898
58	0.4379	0.4360	0.4339	0.4316	0.4293	0.4268	0.4241	0.4214	0.4184	0.4153	0.4121	0.4087	0.4051	0.4013	0.3974
59	0.4450	0.4431	0.4410	0.4388	0.4364	0.4339	0.4313	0.4285	0.4256	0.4225	0.4193	0.4159	0.4123	0.4086	0.4047
60	0.4516	0.4497	0.4476	0.4454	0.4431	0.4406	0.4380	0.4353	0.4324	0.4293	0.4261	0.4227	0.4191	0.4154	0.4115
61	0.4580	0.4561	0.4540	0.4518	0.4495	0.4470	0.4444	0.4417	0.4388	0.4357	0.4325	0.4292	0.4256	0.4219	0.4180
62	0.4641	0.4622	0.4601	0.4579	0.4556	0.4532	0.4506	0.4479	0.4450	0.4420	0.4388	0.4354	0.4319	0.4281	0.4243
63	0.4700	0.4681	0.4661	0.4639	0.4616	0.4592	0.4566	0.4539	0.4510	0.4480	0.4448	0.4415	0.4380	0.4343	0.4304
64	0.4761	0.4742	0.4722	0.4700	0.4677	0.4653	0.4628	0.4601	0.4572	0.4542	0.4510	0.4477	0.4442	0.4405	0.4366
65	0.4824	0.4805	0.4785	0.4764	0.4741	0.4717	0.4692	0.4665	0.4637	0.4607	0.4575	0.4542	0.4507	0.4470	0.4431

Mortality: Participant PBGC Disabled Male  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 75% Joint Survivor Reduction Factors (Disabled).  
Benefit effective upon death of participant if beneficiary thenliving: 75% of participant's benefit.

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
25	0.2486	0.2450	0.2413	0.2375	0.2336	0.2295	0.2254	0.2211	0.2167	0.2123	0.2077	0.2030	0.1982	0.1934	0.1884
26	0.2416	0.2380	0.2343	0.2305	0.2266	0.2225	0.2184	0.2141	0.2098	0.2053	0.2007	0.1961	0.1914	0.1866	0.1817
27	0.2352	0.2316	0.2279	0.2241	0.2201	0.2161	0.2120	0.2077	0.2034	0.1989	0.1944	0.1897	0.1850	0.1803	0.1754
28	0.2298	0.2261	0.2224	0.2186	0.2146	0.2106	0.2064	0.2022	0.1978	0.1934	0.1888	0.1842	0.1795	0.1747	0.1699
29	0.2253	0.2217	0.2180	0.2141	0.2101	0.2061	0.2019	0.1976	0.1933	0.1888	0.1843	0.1796	0.1749	0.1702	0.1653
30	0.2221	0.2184	0.2147	0.2108	0.2068	0.2027	0.1985	0.1942	0.1898	0.1853	0.1808	0.1761	0.1714	0.1666	0.1618
31	0.2201	0.2164	0.2126	0.2087	0.2046	0.2005	0.1963	0.1920	0.1875	0.1830	0.1784	0.1738	0.1690	0.1642	0.1593
32	0.2194	0.2157	0.2118	0.2079	0.2038	0.1996	0.1954	0.1910	0.1865	0.1820	0.1773	0.1726	0.1678	0.1630	0.1581
33	0.2199	0.2161	0.2122	0.2082	0.2041	0.1999	0.1956	0.1912	0.1867	0.1821	0.1774	0.1726	0.1678	0.1628	0.1579
34	0.2216	0.2178	0.2139	0.2099	0.2057	0.2014	0.1971	0.1926	0.1880	0.1834	0.1786	0.1738	0.1689	0.1639	0.1588
35	0.2245	0.2207	0.2167	0.2126	0.2084	0.2041	0.1996	0.1951	0.1905	0.1857	0.1809	0.1760	0.1710	0.1660	0.1608
36	0.2284	0.2245	0.2204	0.2163	0.2120	0.2077	0.2032	0.1986	0.1939	0.1891	0.1842	0.1792	0.1741	0.1690	0.1638
37	0.2330	0.2291	0.2250	0.2208	0.2165	0.2121	0.2075	0.2029	0.1981	0.1932	0.1882	0.1832	0.1780	0.1728	0.1675
38	0.2382	0.2343	0.2302	0.2259	0.2216	0.2171	0.2125	0.2077	0.2029	0.1979	0.1929	0.1877	0.1825	0.1772	0.1718
39	0.2439	0.2399	0.2358	0.2315	0.2270	0.2225	0.2178	0.2130	0.2081	0.2031	0.1980	0.1927	0.1874	0.1820	0.1765
40	0.2500	0.2460	0.2418	0.2374	0.2330	0.2284	0.2236	0.2188	0.2138	0.2087	0.2035	0.1982	0.1927	0.1872	0.1816
41	0.2564	0.2523	0.2481	0.2437	0.2392	0.2345	0.2297	0.2248	0.2198	0.2146	0.2093	0.2039	0.1984	0.1928	0.1871
42	0.2631	0.2590	0.2547	0.2503	0.2457	0.2410	0.2362	0.2312	0.2261	0.2208	0.2155	0.2100	0.2044	0.1987	0.1929
43	0.2700	0.2658	0.2615	0.2571	0.2525	0.2477	0.2428	0.2378	0.2326	0.2273	0.2218	0.2163	0.2106	0.2048	0.1989
44	0.2772	0.2730	0.2686	0.2641	0.2595	0.2547	0.2497	0.2446	0.2394	0.2340	0.2285	0.2228	0.2170	0.2111	0.2051
45	0.2845	0.2803	0.2759	0.2714	0.2667	0.2619	0.2569	0.2517	0.2464	0.2410	0.2354	0.2296	0.2238	0.2178	0.2117
46	0.2922	0.2880	0.2836	0.2790	0.2743	0.2694	0.2644	0.2592	0.2538	0.2483	0.2426	0.2368	0.2309	0.2248	0.2186
47	0.3003	0.2961	0.2916	0.2870	0.2823	0.2774	0.2723	0.2670	0.2616	0.2560	0.2503	0.2444	0.2384	0.2323	0.2260
48	0.3087	0.3045	0.3000	0.2954	0.2906	0.2856	0.2805	0.2752	0.2698	0.2641	0.2583	0.2524	0.2463	0.2401	0.2337
49	0.3173	0.3130	0.3085	0.3039	0.2991	0.2941	0.2889	0.2836	0.2781	0.2724	0.2666	0.2606	0.2544	0.2481	0.2417
50	0.3260	0.3217	0.3172	0.3126	0.3077	0.3027	0.2975	0.2922	0.2866	0.2809	0.2750	0.2690	0.2627	0.2564	0.2498
51	0.3348	0.3305	0.3260	0.3213	0.3165	0.3114	0.3062	0.3008	0.2952	0.2895	0.2835	0.2774	0.2711	0.2647	0.2581
52	0.3436	0.3392	0.3347	0.3300	0.3252	0.3201	0.3149	0.3095	0.3039	0.2981	0.2921	0.2859	0.2796	0.2731	0.2664
53	0.3522	0.3479	0.3434	0.3387	0.3338	0.3288	0.3235	0.3181	0.3124	0.3066	0.3006	0.2944	0.2880	0.2814	0.2747
54	0.3609	0.3566	0.3520	0.3474	0.3425	0.3374	0.3321	0.3266	0.3210	0.3151	0.3091	0.3029	0.2964	0.2898	0.2830
55	0.3694	0.3651	0.3605	0.3558	0.3510	0.3459	0.3406	0.3351	0.3294	0.3235	0.3175	0.3112	0.3047	0.2981	0.2912
56	0.3777	0.3734	0.3689	0.3642	0.3593	0.3542	0.3489	0.3434	0.3377	0.3318	0.3257	0.3194	0.3129	0.3062	0.2993
57	0.3857	0.3814	0.3769	0.3722	0.3673	0.3622	0.3569	0.3513	0.3456	0.3397	0.3336	0.3273	0.3207	0.3140	0.3070
58	0.3933	0.3890	0.3845	0.3798	0.3749	0.3698	0.3645	0.3590	0.3532	0.3473	0.3412	0.3348	0.3282	0.3215	0.3145
59	0.4006	0.3963	0.3918	0.3871	0.3822	0.3771	0.3718	0.3662	0.3605	0.3546	0.3484	0.3420	0.3354	0.3286	0.3216
60	0.4074	0.4031	0.3986	0.3939	0.3890	0.3839	0.3786	0.3730	0.3673	0.3613	0.3551	0.3487	0.3421	0.3353	0.3282
61	0.4139	0.4096	0.4051	0.4004	0.3955	0.3904	0.3851	0.3796	0.3738	0.3678	0.3616	0.3552	0.3485	0.3417	0.3346
62	0.4202	0.4159	0.4114	0.4067	0.4018	0.3967	0.3914	0.3858	0.3801	0.3741	0.3678	0.3614	0.3547	0.3478	0.3407
63	0.4263	0.4220	0.4175	0.4128	0.4080	0.4028	0.3975	0.3919	0.3862	0.3802	0.3739	0.3674	0.3607	0.3538	0.3466
64	0.4325	0.4283	0.4238	0.4191	0.4142	0.4091	0.4038	0.3982	0.3924	0.3864	0.3801	0.3736	0.3669	0.3599	0.3527
65	0.4391	0.4348	0.4303	0.4257	0.4208	0.4157	0.4103	0.4048	0.3990	0.3930	0.3867	0.3802	0.3734	0.3664	0.3592

Mortality: Participant PBGC Disabled Male  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 75% Joint Survivor Reduction Factors (Disabled).  
Benefit effective upon death of participant if beneficiary thenliving: 75% of participant's benefit.

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
25	0.1834	0.1783	0.1731	0.1678	0.1625	0.1571	0.1517	0.1463	0.1408	0.1353	0.1300	0.1241	0.1182	0.1121	0.1069
26	0.1767	0.1716	0.1665	0.1613	0.1561	0.1508	0.1455	0.1401	0.1348	0.1294	0.1241	0.1184	0.1125	0.1064	0.1001
27	0.1704	0.1654	0.1604	0.1552	0.1501	0.1449	0.1396	0.1344	0.1291	0.1239	0.1187	0.1136	0.1081	0.1026	0.0968
28	0.1650	0.1600	0.1550	0.1499	0.1448	0.1396	0.1345	0.1293	0.1241	0.1190	0.1139	0.1088	0.1038	0.0990	0.0938
29	0.1604	0.1555	0.1504	0.1454	0.1403	0.1352	0.1301	0.1249	0.1198	0.1148	0.1097	0.1048	0.0998	0.0950	0.0904
30	0.1569	0.1519	0.1469	0.1418	0.1368	0.1317	0.1266	0.1215	0.1164	0.1113	0.1064	0.1014	0.0966	0.0918	0.0870
31	0.1544	0.1494	0.1444	0.1393	0.1342	0.1291	0.1240	0.1189	0.1138	0.1088	0.1038	0.0989	0.0941	0.0893	0.0846
32	0.1531	0.1480	0.1430	0.1379	0.1328	0.1276	0.1225	0.1174	0.1123	0.1072	0.1022	0.0973	0.0925	0.0877	0.0830
33	0.1528	0.1477	0.1426	0.1375	0.1323	0.1271	0.1219	0.1167	0.1116	0.1065	0.1015	0.0965	0.0917	0.0869	0.0821
34	0.1537	0.1486	0.1434	0.1381	0.1329	0.1276	0.1224	0.1171	0.1119	0.1068	0.1017	0.0967	0.0917	0.0869	0.0821
35	0.1557	0.1504	0.1451	0.1398	0.1345	0.1291	0.1238	0.1184	0.1131	0.1079	0.1027	0.0976	0.0926	0.0877	0.0828
36	0.1585	0.1532	0.1478	0.1424	0.1369	0.1315	0.1260	0.1206	0.1152	0.1098	0.1045	0.0993	0.0942	0.0891	0.0842
37	0.1621	0.1567	0.1512	0.1456	0.1401	0.1345	0.1289	0.1234	0.1179	0.1124	0.1070	0.1016	0.0964	0.0912	0.0861
38	0.1663	0.1607	0.1551	0.1495	0.1438	0.1381	0.1324	0.1267	0.1210	0.1154	0.1099	0.1044	0.0990	0.0937	0.0885
39	0.1709	0.1652	0.1595	0.1537	0.1479	0.1421	0.1363	0.1304	0.1246	0.1189	0.1132	0.1076	0.1020	0.0966	0.0912
40	0.1759	0.1701	0.1643	0.1584	0.1525	0.1465	0.1405	0.1346	0.1286	0.1227	0.1168	0.1111	0.1054	0.0998	0.0942
41	0.1813	0.1754	0.1694	0.1634	0.1573	0.1512	0.1451	0.1390	0.1329	0.1268	0.1208	0.1149	0.1090	0.1032	0.0975
42	0.1869	0.1809	0.1749	0.1687	0.1625	0.1563	0.1500	0.1437	0.1375	0.1312	0.1250	0.1189	0.1129	0.1070	0.1011
43	0.1928	0.1867	0.1804	0.1742	0.1679	0.1615	0.1551	0.1487	0.1422	0.1359	0.1295	0.1232	0.1170	0.1109	0.1048
44	0.1990	0.1928	0.1865	0.1801	0.1736	0.1671	0.1605	0.1539	0.1473	0.1408	0.1342	0.1278	0.1214	0.1151	0.1088
45	0.2055	0.1991	0.1927	0.1862	0.1796	0.1729	0.1662	0.1594	0.1527	0.1459	0.1392	0.1326	0.1260	0.1195	0.1131
46	0.2123	0.2058	0.1993	0.1926	0.1859	0.1791	0.1722	0.1653	0.1584	0.1515	0.1446	0.1378	0.1310	0.1243	0.1177
47	0.2196	0.2130	0.2063	0.1995	0.1927	0.1857	0.1787	0.1716	0.1646	0.1575	0.1504	0.1434	0.1365	0.1296	0.1227
48	0.2272	0.2205	0.2137	0.2068	0.1998	0.1927	0.1856	0.1784	0.1711	0.1639	0.1566	0.1494	0.1423	0.1352	0.1281
49	0.2350	0.2283	0.2214	0.2144	0.2072	0.2000	0.1927	0.1853	0.1779	0.1705	0.1631	0.1557	0.1484	0.1410	0.1338
50	0.2431	0.2362	0.2293	0.2221	0.2149	0.2075	0.2001	0.1926	0.1850	0.1774	0.1698	0.1622	0.1547	0.1472	0.1397
51	0.2513	0.2444	0.2373	0.2300	0.2227	0.2152	0.2076	0.2000	0.1922	0.1845	0.1767	0.1690	0.1612	0.1535	0.1458
52	0.2595	0.2525	0.2453	0.2380	0.2305	0.2229	0.2152	0.2074	0.1996	0.1917	0.1837	0.1758	0.1679	0.1600	0.1521
53	0.2678	0.2607	0.2534	0.2460	0.2384	0.2307	0.2229	0.2149	0.2069	0.1989	0.1908	0.1827	0.1746	0.1665	0.1584
54	0.2760	0.2688	0.2615	0.2540	0.2584	0.2385	0.2305	0.2225	0.2143	0.2061	0.1979	0.1897	0.1814	0.1732	0.1649
55	0.2842	0.2769	0.2695	0.2619	0.2541	0.2462	0.2382	0.2300	0.2217	0.2134	0.2050	0.1966	0.1882	0.1798	0.1713
56	0.2922	0.2848	0.2773	0.2697	0.2618	0.2538	0.2457	0.2374	0.2290	0.2205	0.2120	0.2035	0.1949	0.1863	0.1777
57	0.2999	0.2925	0.2850	0.2772	0.2693	0.2612	0.2529	0.2446	0.2361	0.2275	0.2188	0.2101	0.2014	0.1927	0.1839
58	0.3073	0.2998	0.2922	0.2844	0.2764	0.2682	0.2599	0.2514	0.2428	0.2341	0.2253	0.2165	0.2077	0.1988	0.1898
59	0.3143	0.3068	0.2992	0.2913	0.2832	0.2749	0.2665	0.2579	0.2492	0.2404	0.2315	0.2226	0.2136	0.2046	0.1955
60	0.3209	0.3134	0.3056	0.2977	0.2896	0.2812	0.2727	0.2640	0.2552	0.2463	0.2373	0.2282	0.2191	0.2100	0.2007
61	0.3272	0.3196	0.3118	0.3038	0.2956	0.2872	0.2786	0.2698	0.2609	0.2519	0.2428	0.2336	0.2244	0.2151	0.2057
62	0.3333	0.3256	0.3178	0.3097	0.3014	0.2929	0.2843	0.2754	0.2664	0.2573	0.2480	0.2387	0.2294	0.2200	0.2104
63	0.3392	0.3315	0.3236	0.3155	0.3071	0.2985	0.2898	0.2808	0.2717	0.2625	0.2531	0.2437	0.2342	0.2246	0.2150
64	0.3452	0.3375	0.3296	0.3214	0.3129	0.3043	0.2954	0.2864	0.2772	0.2678	0.2583	0.2488	0.2392	0.2295	0.2196
65	0.3517	0.3439	0.3359	0.3276	0.3191	0.3104	0.3014	0.2923	0.2830	0.2735	0.2639	0.2542	0.2445	0.2346	0.2246

Mortality: Participant PBGC Disabled Male  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 100% Joint Survivor Factors (Disabled)  
Benefit effective upon death of participant, if beneficiary then living: 100% of participant's benefit.

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
25	0.3512	0.3491	0.3468	0.3445	0.3420	0.3393	0.3366	0.3338	0.3308	0.3276	0.3244	0.3210	0.3175	0.3138	0.3100
26	0.3437	0.3415	0.3392	0.3368	0.3343	0.3317	0.3289	0.3260	0.3230	0.3198	0.3165	0.3131	0.3096	0.3059	0.3021
27	0.3368	0.3346	0.3323	0.3299	0.3274	0.3247	0.3219	0.3190	0.3159	0.3127	0.3094	0.3060	0.3024	0.2987	0.2948
28	0.3310	0.3288	0.3265	0.3240	0.3214	0.3187	0.3159	0.3130	0.3099	0.3067	0.3033	0.2998	0.2962	0.2925	0.2886
29	0.3264	0.3242	0.3218	0.3193	0.3167	0.3140	0.3111	0.3082	0.3050	0.3018	0.2984	0.2949	0.2912	0.2874	0.2835
30	0.3232	0.3209	0.3185	0.3160	0.3133	0.3106	0.3077	0.3047	0.3015	0.2982	0.2948	0.2913	0.2876	0.2838	0.2798
31	0.3213	0.3190	0.3166	0.3141	0.3114	0.3086	0.3057	0.3026	0.2995	0.2961	0.2927	0.2891	0.2854	0.2815	0.2775
32	0.3209	0.3186	0.3162	0.3136	0.3109	0.3081	0.3052	0.3021	0.2989	0.2956	0.2921	0.2885	0.2847	0.2808	0.2768
33	0.3219	0.3196	0.3171	0.3146	0.3119	0.3090	0.3061	0.3030	0.2997	0.2964	0.2928	0.2892	0.2854	0.2815	0.2774
34	0.3243	0.3220	0.3195	0.3169	0.3142	0.3113	0.3084	0.3052	0.3020	0.2986	0.2950	0.2914	0.2875	0.2836	0.2795
35	0.3279	0.3256	0.3231	0.3205	0.3178	0.3149	0.3119	0.3088	0.3055	0.3021	0.2985	0.2948	0.2910	0.2870	0.2828
36	0.3326	0.3303	0.3278	0.3252	0.3225	0.3196	0.3166	0.3134	0.3101	0.3067	0.3031	0.2994	0.2955	0.2915	0.2873
37	0.3382	0.3359	0.3334	0.3308	0.3280	0.3251	0.3221	0.3190	0.3156	0.3122	0.3086	0.3048	0.3009	0.2969	0.2927
38	0.3444	0.3420	0.3396	0.3369	0.3342	0.3313	0.3283	0.3251	0.3218	0.3183	0.3147	0.3109	0.3070	0.3029	0.2987
39	0.3510	0.3487	0.3462	0.3436	0.3408	0.3379	0.3349	0.3317	0.3284	0.3249	0.3213	0.3175	0.3136	0.3095	0.3052
40	0.3581	0.3557	0.3532	0.3506	0.3479	0.3450	0.3420	0.3388	0.3354	0.3320	0.3283	0.3245	0.3206	0.3165	0.3122
41	0.3654	0.3630	0.3606	0.3579	0.3552	0.3523	0.3493	0.3461	0.3428	0.3393	0.3356	0.3318	0.3279	0.3237	0.3194
42	0.3730	0.3706	0.3682	0.3656	0.3628	0.3600	0.3569	0.3537	0.3504	0.3469	0.3433	0.3395	0.3355	0.3313	0.3270
43	0.3807	0.3784	0.3759	0.3733	0.3706	0.3677	0.3647	0.3615	0.3582	0.3547	0.3510	0.3472	0.3433	0.3391	0.3348
44	0.3886	0.3863	0.3839	0.3813	0.3786	0.3757	0.3727	0.3695	0.3662	0.3627	0.3591	0.3553	0.3513	0.3471	0.3428
45	0.3968	0.3945	0.3920	0.3895	0.3868	0.3839	0.3809	0.3777	0.3744	0.3709	0.3673	0.3635	0.3595	0.3554	0.3510
46	0.4052	0.4029	0.4005	0.3979	0.3952	0.3924	0.3894	0.3863	0.3830	0.3795	0.3758	0.3720	0.3681	0.3639	0.3596
47	0.4139	0.4117	0.4093	0.4067	0.4040	0.4012	0.3983	0.3951	0.3918	0.3884	0.3847	0.3810	0.3770	0.3728	0.3685
48	0.4229	0.4207	0.4183	0.4158	0.4131	0.4103	0.4074	0.4042	0.4010	0.3975	0.3939	0.3901	0.3862	0.3821	0.3777
49	0.4320	0.4298	0.4274	0.4249	0.4223	0.4195	0.4166	0.4135	0.4102	0.4068	0.4032	0.3995	0.3955	0.3914	0.3871
50	0.4412	0.4390	0.4366	0.4342	0.4315	0.4288	0.4259	0.4228	0.4196	0.4162	0.4126	0.4089	0.4050	0.4009	0.3966
51	0.4503	0.4481	0.4458	0.5063	0.4408	0.4381	0.4352	0.4321	0.4289	0.4255	0.4220	0.4183	0.4144	0.4103	0.4060
52	0.4594	0.4572	0.4549	0.4525	0.4499	0.4472	0.4444	0.4414	0.4382	0.4348	0.4313	0.4276	0.4238	0.4197	0.4154
53	0.4683	0.4662	0.4639	0.4615	0.4590	0.4563	0.4536	0.4505	0.4473	0.4440	0.4405	0.4368	0.4330	0.4290	0.4247
54	0.4771	0.4750	0.4727	0.4704	0.4679	0.4652	0.4624	0.4594	0.4563	0.4530	0.4496	0.4459	0.4421	0.4381	0.4339
55	0.4857	0.4836	0.4814	0.4790	0.4766	0.4739	0.4712	0.4682	0.4651	0.4618	0.4584	0.4548	0.4510	0.4471	0.4429
56	0.4940	0.4919	0.4898	0.4874	0.4850	0.4824	0.4796	0.4767	0.4737	0.4704	0.4670	0.4634	0.4597	0.4557	0.4516
57	N/A	0.4999	0.4978	0.4955	0.4931	0.4905	0.4878	0.4849	0.4818	0.4786	0.4753	0.4717	0.4680	0.4641	0.4600
58	N/A	N/A	N/A	N/A	N/A	0.4982	0.4955	0.4926	0.4896	0.4864	0.4831	0.4796	0.4759	0.4720	0.4679
59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.4970	0.4938	0.4905	0.4870	0.4834	0.4795	0.4754
60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.4974	0.4940	0.4903	0.4865	0.4825
61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.4970	0.4932	0.4892
62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.4996	0.4956
63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*N/A: Reduction over 50% not allowed under IRS rules.

Mortality: Participant PBGC SS Disabled Males  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 100% Joint Survivor Factors (Disabled)  
Benefit effective upon death of participant, if beneficiary then living: 100% of participant's benefit.

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
25	0.3061	0.3020	0.2978	0.2934	0.2889	0.2843	0.2795	0.2746	0.2695	0.2643	0.2590	0.2535	0.2479	0.2422	0.2364
26	0.2981	0.2940	0.2898	0.2854	0.2809	0.2762	0.2714	0.2665	0.2614	0.2562	0.2509	0.2454	0.2399	0.2342	0.2284
27	0.2908	0.2867	0.2824	0.2780	0.2735	0.2688	0.2640	0.2590	0.2539	0.2487	0.2434	0.2379	0.2324	0.2267	0.2209
28	0.2845	0.2804	0.2761	0.2716	0.2671	0.2624	0.2575	0.2525	0.2474	0.2422	0.2369	0.2314	0.2258	0.2202	0.2144
29	0.2795	0.2753	0.2709	0.2665	0.2618	0.2571	0.2522	0.2472	0.2421	0.2368	0.2315	0.2260	0.2204	0.2147	0.2089
30	0.2757	0.2715	0.2671	0.2626	0.2579	0.2531	0.2482	0.2432	0.2380	0.2327	0.2273	0.2218	0.2162	0.2105	0.2047
31	0.2734	0.2691	0.2647	0.2601	0.2554	0.2506	0.2456	0.2405	0.2353	0.2300	0.2245	0.2190	0.2131	0.2076	0.2017
32	0.2726	0.2683	0.2638	0.2592	0.2544	0.2496	0.2445	0.2394	0.2341	0.2288	0.2232	0.2176	0.2119	0.2061	0.2002
33	0.2732	0.2688	0.2643	0.2596	0.2548	0.2499	0.2448	0.2396	0.2343	0.2289	0.2233	0.2176	0.2118	0.2059	0.2000
34	0.2752	0.2708	0.2662	0.2615	0.2567	0.2517	0.2466	0.2413	0.2359	0.2304	0.2248	0.2190	0.2131	0.2072	0.2011
35	0.2785	0.2741	0.2695	0.2647	0.2598	0.2548	0.2496	0.2443	0.2388	0.2332	0.2275	0.2217	0.2157	0.2097	0.2035
36	0.2829	0.2785	0.2738	0.2690	0.2641	0.2590	0.2537	0.2483	0.2428	0.2372	0.2314	0.2255	0.2194	0.2133	0.2071
37	0.2883	0.2838	0.2791	0.2742	0.2693	0.2641	0.2588	0.2534	0.2478	0.2420	0.2362	0.2302	0.2241	0.2178	0.2115
38	0.2943	0.2897	0.2850	0.2801	0.2751	0.2699	0.2645	0.2590	0.2534	0.2476	0.2416	0.2356	0.2294	0.2230	0.2166
39	0.3008	0.2962	0.2914	0.2865	0.2814	0.2762	0.2708	0.2652	0.2595	0.2536	0.2476	0.2415	0.2352	0.2288	0.2222
40	0.3077	0.3031	0.2983	0.2934	0.2882	0.2830	0.2775	0.2719	0.2661	0.2602	0.2541	0.2478	0.2415	0.2350	0.2283
41	0.3150	0.3103	0.3055	0.3005	0.2954	0.2900	0.2845	0.2789	0.2730	0.2670	0.2609	0.2546	0.2481	0.2415	0.2348
42	0.3225	0.3179	0.3130	0.3080	0.3028	0.2975	0.2919	0.2862	0.2803	0.2743	0.2680	0.2617	0.2551	0.2484	0.2416
43	0.3303	0.3256	0.3207	0.3157	0.3105	0.3051	0.2995	0.2937	0.2878	0.2817	0.2754	0.2690	0.2623	0.2556	0.2487
44	0.3383	0.3336	0.3287	0.3237	0.3184	0.3130	0.3074	0.3016	0.2956	0.2894	0.2831	0.2766	0.2699	0.2630	0.2560
45	0.3469	0.3418	0.3369	0.3318	0.3266	0.3211	0.3155	0.3096	0.3036	0.2974	0.2910	0.2844	0.2777	0.2707	0.2637
46	0.3551	0.3504	0.3455	0.3404	0.3351	0.3296	0.3239	0.3181	0.3120	0.3058	0.2993	0.2927	0.2859	0.2789	0.2717
47	0.3640	0.3593	0.3544	0.3493	0.3440	0.3385	0.3328	0.3269	0.3208	0.3145	0.3081	0.3014	0.2945	0.2874	0.2802
48	0.3732	0.3685	0.3636	0.3585	0.3532	0.3477	0.3420	0.3361	0.3300	0.3237	0.3171	0.3104	0.3035	0.2964	0.2891
49	0.3826	0.3779	0.3730	0.3679	0.3626	0.3571	0.3514	0.3455	0.3393	0.3330	0.3264	0.3197	0.3127	0.3055	0.2982
50	0.3921	0.3874	0.3825	0.3774	0.3721	0.3666	0.3609	0.3550	0.3488	0.3425	0.3359	0.3291	0.3221	0.3149	0.3075
51	0.4016	0.3969	0.3921	0.3870	0.3817	0.3762	0.3705	0.3645	0.3584	0.3515	0.3454	0.3386	0.3316	0.3243	0.3169
52	0.4110	0.4064	0.4015	0.3964	0.3912	0.3857	0.3800	0.3740	0.3679	0.3615	0.3549	0.3481	0.3410	0.3337	0.3262
53	0.4203	0.4157	0.4108	0.4058	0.4005	0.3951	0.3894	0.3834	0.3773	0.3709	0.3643	0.3574	0.3504	0.3431	0.3355
54	0.4295	0.4249	0.4201	0.4151	0.4098	0.4044	0.3987	0.3928	0.3866	0.3802	0.3736	0.3668	0.3597	0.3524	0.3448
55	0.4385	0.4339	0.4292	0.4242	0.4189	0.4135	0.4078	0.4019	0.3958	0.3894	0.3828	0.3759	0.3688	0.3615	0.3539
56	0.4473	0.4427	0.4380	0.4330	0.4278	0.4224	0.4167	0.4108	0.4047	0.3983	0.3917	0.3849	0.3778	0.3704	0.3628
57	0.4557	0.4511	0.4464	0.4414	0.4364	0.4309	0.4252	0.4193	0.4132	0.4069	0.4003	0.3934	0.3863	0.3790	0.3714
58	0.4636	0.4591	0.4544	0.4495	0.4443	0.4389	0.4333	0.4275	0.4214	0.4150	0.4084	0.4016	0.3945	0.3871	0.3795
59	0.4712	0.4667	0.4620	0.4571	0.4520	0.4466	0.4410	0.4352	0.4291	0.4228	0.4162	0.4093	0.4022	0.3949	0.3872
60	0.4782	0.4738	0.4691	0.4642	0.4591	0.4538	0.4482	0.4424	0.4363	0.4300	0.4234	0.4166	0.4095	0.4021	0.3945
61	0.4849	0.4805	0.4759	0.4710	0.4659	0.4606	0.4550	0.4492	0.4432	0.4369	0.4303	0.4234	0.4163	0.4090	0.4140
62	0.4914	0.4870	0.4824	0.4775	0.4725	0.4672	0.4616	0.4558	0.4498	0.4435	0.4369	0.4301	0.4229	0.4156	0.4079
63	0.4977	0.4933	0.4887	0.4839	0.4788	0.4735	0.4680	0.4622	0.4562	0.4499	0.4433	0.4365	0.4294	0.4220	0.4143
64	N/A	0.4997	0.4951	0.4903	0.4853	0.4800	0.4745	0.4687	0.4627	0.4564	0.4498	0.4430	0.4359	0.4285	0.4208
65	N/A	N/A	N/A	0.4970	0.4920	0.4868	0.4813	0.4755	0.4695	0.4633	0.4567	0.4499	0.4428	0.4354	0.4277

Mortality: Participant PBGC SS Disabled Males  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 100% Joint Survivor Factors (Disabled)  
Benefit effective upon death of participant, if beneficiary then living: 100% of participant's benefit.

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
25	0.2305	0.2244	0.2182	0.2119	0.2055	0.1991	0.1925	0.1859	0.1793	0.1726	0.1661	0.1589	0.1516	0.1440	0.1376
26	0.2225	0.2164	0.2103	0.2041	0.1978	0.1914	0.1850	0.1785	0.1720	0.1654	0.1589	0.1519	0.1446	0.1370	0.1291
27	0.2150	0.2090	0.2030	0.1968	0.1906	0.1842	0.1779	0.1715	0.1651	0.1587	0.1523	0.1459	0.1391	0.1323	0.1251
28	0.2085	0.2025	0.1965	0.1904	0.1842	0.1779	0.1716	0.1653	0.1589	0.1526	0.1463	0.1400	0.1338	0.1277	0.1213
29	0.2030	0.1971	0.1910	0.1849	0.1787	0.1725	0.1662	0.1599	0.1537	0.1474	0.1411	0.1350	0.1288	0.1228	0.1170
30	0.1988	0.1928	0.1867	0.1806	0.1744	0.1682	0.1619	0.1556	0.1494	0.1432	0.1370	0.1308	0.1248	0.1187	0.1128
31	0.1958	0.1897	0.1836	0.1775	0.1713	0.1650	0.1588	0.1525	0.1462	0.1400	0.1338	0.1277	0.1216	0.1157	0.1097
32	0.1942	0.1881	0.1820	0.1758	0.1695	0.1632	0.1569	0.1506	0.1443	0.1380	0.1318	0.1257	0.1196	0.1136	0.1077
33	0.1939	0.1877	0.1815	0.1689	0.1689	0.1626	0.1562	0.1498	0.1435	0.1372	0.1309	0.1247	0.1186	0.1126	0.1066
34	0.1950	0.1887	0.1824	0.1761	0.1697	0.1632	0.1568	0.1503	0.1377	0.1375	0.1311	0.1249	0.1187	0.1126	0.1065
35	0.1973	0.1910	0.1846	0.1781	0.1716	0.1651	0.1585	0.1519	0.1454	0.1389	0.1324	0.1261	0.1198	0.1136	0.1074
36	0.2007	0.1943	0.1878	0.1812	0.1746	0.1679	0.1612	0.1545	0.1479	0.1412	0.1347	0.1282	0.1218	0.1154	0.1092
37	0.2051	0.1985	0.1919	0.1852	0.1785	0.1717	0.1648	0.1580	0.1512	0.1444	0.1377	0.1311	0.1245	0.1180	0.1116
38	0.2101	0.2034	0.1967	0.1898	0.1830	0.1760	0.1691	0.1621	0.1551	0.1482	0.1413	0.1345	0.1278	0.1212	0.1146
39	0.2156	0.2088	0.2019	0.1950	0.1880	0.1809	0.1738	0.1667	0.1595	0.1525	0.1454	0.1384	0.1315	0.1247	0.1180
40	0.2216	0.2147	0.2077	0.2006	0.1935	0.1863	0.1790	0.1717	0.1644	0.1572	0.1499	0.1428	0.1357	0.1287	0.1218
41	0.2279	0.2209	0.2138	0.2066	0.1993	0.1920	0.1845	0.1771	0.1696	0.1622	0.1548	0.1475	0.1402	0.1330	0.1259
42	0.2346	0.2275	0.2203	0.2130	0.2055	0.1980	0.1905	0.1829	0.1752	0.1676	0.1601	0.1525	0.1451	0.1377	0.1304
43	0.2416	0.2344	0.2269	0.2196	0.2120	0.2043	0.1966	0.1889	0.1811	0.1733	0.1655	0.1578	0.1502	0.1426	0.1350
44	0.2488	0.2415	0.2341	0.2265	0.2188	0.2110	0.2031	0.1952	0.1872	0.1793	0.1713	0.1634	0.1556	0.1478	0.1400
45	0.2564	0.2490	0.2414	0.2337	0.2259	0.2179	0.2099	0.2018	0.1937	0.1856	0.1774	0.1693	0.1613	0.1533	0.1453
46	0.2644	0.2568	0.2492	0.2413	0.2334	0.2253	0.2172	0.2089	0.2006	0.1923	0.1840	0.1757	0.1674	0.1592	0.1510
47	0.2728	0.2652	0.2574	0.2495	0.2414	0.2332	0.2249	0.2165	0.2080	0.1995	0.1910	0.1825	0.1740	0.1656	0.1572
48	0.2816	0.2115	0.2660	0.2580	0.2498	0.2415	0.2330	0.2245	0.2158	0.2072	0.1985	0.1898	0.1811	0.1724	0.1638
49	0.2906	0.2828	0.2749	0.2668	0.2585	0.2500	0.2414	0.2327	0.2240	0.2151	0.2062	0.1974	0.1885	0.1796	0.1707
50	0.2998	0.2920	0.2840	0.2758	0.2674	0.2588	0.2501	0.2413	0.2323	0.2233	0.2143	0.2052	0.1962	0.1871	0.1780
51	0.3092	0.3013	0.2932	0.2849	0.2764	0.2677	0.2589	0.2499	0.2409	0.2317	0.2225	0.2133	0.2040	0.1948	0.1854
52	0.3185	0.3105	0.3024	0.2940	0.2854	0.2767	0.2677	0.2587	0.2495	0.2402	0.2308	0.2214	0.2120	0.2025	0.1930
53	0.3278	0.3187	0.3115	0.3031	0.2945	0.2856	0.2766	0.2674	0.2581	0.2487	0.2392	0.2296	0.2200	0.2104	0.2007
54	0.3370	0.3290	0.3207	0.3122	0.3035	0.2946	0.2854	0.2762	0.2667	0.2572	0.2476	0.2379	0.2281	0.2183	0.2084
55	0.3461	0.3380	0.3297	0.3212	0.3124	0.3034	0.2942	0.2848	0.2753	0.2656	0.2559	0.2460	0.2361	0.2261	0.2161
56	0.3550	0.3469	0.3385	0.3299	0.3211	0.3120	0.3028	0.2933	0.2837	0.2739	0.2640	0.2541	0.2440	0.2339	0.2237
57	0.3635	0.3554	0.3470	0.3383	0.3295	0.3204	0.3110	0.3015	0.2918	0.2819	0.2719	0.2619	0.2517	0.2414	0.2310
58	0.3716	0.3635	0.3550	0.3464	0.3374	0.3283	0.3189	0.3093	0.2995	0.2895	0.2794	0.2692	0.2590	0.2486	0.2380
59	0.3793	0.3712	0.3627	0.3540	0.3450	0.3358	0.3264	0.3167	0.3068	0.2968	0.2866	0.2763	0.2659	0.2554	0.2447
60	0.3865	0.3783	0.3698	0.3611	0.3521	0.3428	0.3333	0.3236	0.3136	0.3035	0.2932	0.2828	0.2723	0.2616	0.2509
61	0.3934	0.3851	0.3766	0.3679	0.3588	0.3495	0.3399	0.3301	0.3201	0.3099	0.2995	0.2890	0.2784	0.2676	0.2567
62	0.3999	0.3917	0.3831	0.3743	0.3652	0.3558	0.3462	0.3363	0.3262	0.3159	0.3055	0.2949	0.2841	0.2732	0.2622
63	0.4063	0.3980	0.3895	0.3806	0.3715	0.3620	0.3523	0.3424	0.3322	0.3218	0.3112	0.3005	0.2897	0.2787	0.2675
64	0.4128	0.4045	0.3959	0.3870	0.3778	0.3683	0.3586	0.3486	0.3383	0.3278	0.3172	0.3063	0.2954	0.2842	0.2729
65	0.4197	0.4114	0.4027	0.3938	0.3846	0.3750	0.3652	0.3551	0.3448	0.3342	0.3234	0.3125	0.3014	0.2901	0.2786

Mortality: Participant PBGC SS Disabled Males  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 50% Joint Survivor Reduction Factors (Healthy) with lifetime "Pop-Up" feature.  
 50% benefit continuation upon death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
55	0.1631	0.1614	0.1597	0.1579	0.1560	0.1541	0.1521	0.1500	0.1479	0.1456	0.1434	0.1410	0.1386	0.1361	0.1336
56	0.1724	0.1707	0.1689	0.1671	0.1652	0.1632	0.1612	0.1591	0.1569	0.1546	0.1523	0.1499	0.1474	0.1449	0.1423
57	0.1820	0.1803	0.1786	0.1767	0.1748	0.1728	0.1707	0.1685	0.1663	0.1640	0.1616	0.1592	0.1567	0.1541	0.1514
58	0.1921	0.1904	0.1886	0.1867	0.1847	0.1827	0.1806	0.1784	0.1761	0.1738	0.1714	0.1689	0.1663	0.1636	0.1609
59	0.2026	0.2008	0.1990	0.1971	0.1951	0.1931	0.1909	0.1887	0.1864	0.1840	0.1816	0.1790	0.1764	0.1737	0.1709
60	0.2134	0.2117	0.2098	0.2079	0.2059	0.2039	0.2017	0.1994	0.1971	0.1947	0.1922	0.1896	0.1869	0.1841	0.1813
61	0.2247	0.2229	0.2211	0.2192	0.2171	0.2150	0.2129	0.2106	0.2082	0.2058	0.2032	0.2006	0.1978	0.1950	0.1921
62	0.2364	0.2346	0.2327	0.2308	0.2288	0.2266	0.2244	0.2221	0.2197	0.2172	0.2147	0.2120	0.2092	0.2064	0.2034
63	0.2484	0.2466	0.2448	0.2428	0.2408	0.2386	0.2364	0.2341	0.2316	0.2291	0.2265	0.2238	0.2210	0.2181	0.2151
64	0.2608	0.2590	0.2571	0.2552	0.2531	0.2510	0.2487	0.2464	0.2439	0.2414	0.2387	0.2360	0.2332	0.2302	0.2272
65	0.2735	0.2717	0.2698	0.2679	0.2658	0.2636	0.2614	0.2590	0.2566	0.2540	0.2513	0.2486	0.2457	0.2427	0.2396
66	0.2865	0.2847	0.2828	0.2808	0.2788	0.2766	0.2743	0.2719	0.2695	0.2669	0.2642	0.2614	0.2585	0.2555	0.2524
67	0.2998	0.2980	0.2961	0.2941	0.2920	0.2899	0.2876	0.2852	0.2827	0.2801	0.2774	0.2746	0.2717	0.2686	0.2655
68	0.3134	0.3116	0.3098	0.3078	0.3057	0.3035	0.3012	0.2988	0.2963	0.2937	0.2910	0.2882	0.2852	0.2822	0.2790
69	0.3275	0.3257	0.3239	0.3219	0.3198	0.3176	0.3153	0.3129	0.3104	0.3078	0.3051	0.3022	0.2993	0.2962	0.2930
70	0.3421	0.3403	0.3384	0.3364	0.3344	0.3322	0.3299	0.3275	0.3250	0.3224	0.3196	0.3168	0.3138	0.3107	0.3075
71	0.3570	0.3553	0.3534	0.3514	0.3493	0.3472	0.3449	0.3425	0.3400	0.3374	0.3346	0.3318	0.3288	0.3257	0.3224
72	0.3724	0.3706	0.3688	0.3668	0.3648	0.3626	0.3603	0.3579	0.3554	0.3528	0.3501	0.3472	0.3442	0.3411	0.3379
73	0.3881	0.3864	0.3845	0.3826	0.3805	0.3784	0.3761	0.3737	0.3713	0.3686	0.3659	0.3631	0.3601	0.3570	0.3537
74	0.4041	0.4024	0.4006	0.3987	0.3966	0.3945	0.3922	0.3899	0.3874	0.3848	0.3821	0.3792	0.3763	0.3731	0.3699
75	0.4204	0.4187	0.4169	0.4150	0.4130	0.4109	0.4086	0.4063	0.4038	0.4012	0.3985	0.3957	0.3927	0.3896	0.3864

Mortality: Participant UP84+1  
 Beneficiary UP84-4

Interest Rate: 6%



NCEW 50% Joint Survivor Reduction Factors (Healthy) with lifetime "Pop-Up" feature.  
 50% benefit continuation upon death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
55	0.1310	0.1284	0.1257	0.1229	0.1202	0.1173	0.1145	0.1116	0.1087	0.1057	0.1028	0.0998	0.0968	0.0938	0.0908
56	0.1396	0.1369	0.1341	0.1313	0.1284	0.1255	0.1225	0.1195	0.1165	0.1134	0.1103	0.1072	0.1041	0.1010	0.0978
57	0.1487	0.1459	0.1430	0.1401	0.1371	0.1341	0.1310	0.1279	0.1247	0.1215	0.1183	0.1151	0.1118	0.1085	0.1052
58	0.1581	0.1552	0.1523	0.1493	0.1462	0.1431	0.1399	0.1367	0.1334	0.1301	0.1267	0.1233	0.1199	0.1165	0.1131
59	0.1680	0.1650	0.1620	0.1589	0.1558	0.1526	0.1493	0.1459	0.1425	0.1391	0.1356	0.1321	0.1286	0.1250	0.1214
60	0.1783	0.1753	0.1722	0.1691	0.1658	0.1625	0.1591	0.1557	0.1522	0.1486	0.1450	0.1413	0.1376	0.1339	0.1302
61	0.1891	0.1860	0.1829	0.1796	0.1763	0.1729	0.1694	0.1659	0.1623	0.1586	0.1548	0.1511	0.1472	0.1434	0.1394
62	0.2003	0.1972	0.1940	0.1906	0.1872	0.1837	0.1802	0.1765	0.1728	0.1690	0.1652	0.1612	0.1573	0.1533	0.1492
63	0.2120	0.2088	0.2055	0.2021	0.1986	0.1950	0.1914	0.1876	0.1838	0.1799	0.1759	0.1719	0.1678	0.1636	0.1594
64	0.2240	0.2207	0.2174	0.2139	0.2104	0.2067	0.2030	0.1991	0.1952	0.1912	0.1871	0.1830	0.1787	0.1744	0.1701
65	0.2364	0.2331	0.2297	0.2262	0.2225	0.2188	0.2150	0.2111	0.2071	0.2030	0.1988	0.1945	0.1901	0.1857	0.1812
66	0.2491	0.2458	0.2423	0.2387	0.2350	0.2313	0.2274	0.2234	0.2193	0.2150	0.2107	0.2064	0.2019	0.1973	0.1927
67	0.2622	0.2588	0.2553	0.2517	0.2479	0.2441	0.2401	0.2360	0.2318	0.2275	0.2231	0.2186	0.2140	0.2093	0.2046
68	0.2757	0.2722	0.2687	0.2650	0.2612	0.2573	0.2533	0.2491	0.2449	0.2405	0.2360	0.2314	0.2267	0.2219	0.2170
69	0.2896	0.2862	0.2826	0.2789	0.2750	0.2711	0.2670	0.2628	0.2584	0.2540	0.2494	0.2447	0.2399	0.2350	0.2299
70	0.3041	0.3006	0.2970	0.2933	0.2894	0.2854	0.2812	0.2770	0.2726	0.2680	0.2634	0.2586	0.2537	0.2487	0.2435
71	0.3191	0.3156	0.3119	0.3081	0.3042	0.3002	0.2960	0.2917	0.2872	0.2826	0.2779	0.2730	0.2680	0.2629	0.2577
72	0.3345	0.3310	0.3273	0.3235	0.3196	0.3155	0.3113	0.3069	0.3024	0.2978	0.2930	0.2880	0.2830	0.2778	0.2724
73	0.3503	0.3468	0.3431	0.3393	0.3354	0.3313	0.3270	0.3226	0.3181	0.3134	0.3085	0.3035	0.2984	0.2931	0.2877
74	0.3665	0.3630	0.3593	0.3555	0.3515	0.3474	0.3432	0.3387	0.3342	0.3294	0.3245	0.3195	0.3143	0.3089	0.3034
75	0.3830	0.3795	0.3758	0.3720	0.3681	0.3639	0.3596	0.3552	0.3506	0.3458	0.3409	0.3358	0.3306	0.3252	0.3196

Mortality: Participant UP84+1  
 Beneficiary UP84-4

Interest Rate: 6%

NCEW 50% Joint Survivor Reduction Factors (Healthy) with lifetime "Pop-Up" feature.  
 50% benefit continuation upon death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
55	0.0879	0.0849	0.0820	0.0791	0.0762	0.0733	0.0705	0.0677	0.0650	0.0623	0.0597	0.0571	0.0546	0.0522	0.0498
56	0.0947	0.0916	0.0885	0.0854	0.0823	0.0793	0.0763	0.0733	0.0704	0.0676	0.0648	0.0620	0.0593	0.0567	0.0541
57	0.1019	0.0986	0.0954	0.0921	0.0889	0.0857	0.0825	0.0794	0.0763	0.0732	0.0702	0.0673	0.0644	0.0616	0.0588
58	0.1096	0.1062	0.1027	0.0993	0.0959	0.0925	0.0891	0.0858	0.0825	0.0792	0.0761	0.0729	0.0698	0.0668	0.0639
59	0.1178	0.1141	0.1105	0.1069	0.1033	0.0997	0.0962	0.0926	0.0892	0.0857	0.0823	0.0790	0.0757	0.0725	0.0693
60	0.1264	0.1226	0.1188	0.1150	0.1112	0.1074	0.1037	0.1000	0.0963	0.0926	0.0890	0.0855	0.0820	0.0785	0.0751
61	0.1355	0.1315	0.1276	0.1236	0.1196	0.1157	0.1117	0.1078	0.1039	0.1000	0.0962	0.0924	0.0887	0.0850	0.0814
62	0.1451	0.1410	0.1368	0.1327	0.1285	0.1243	0.1202	0.1160	0.1119	0.1078	0.1038	0.0998	0.0959	0.0920	0.0881
63	0.1552	0.1318	0.1465	0.1422	0.1378	0.1335	0.1291	0.1248	0.1204	0.1161	0.1119	0.1076	0.1035	0.0993	0.0952
64	0.1657	0.1612	0.1567	0.1522	0.1476	0.1431	0.1385	0.1340	0.1294	0.1249	0.1204	0.1159	0.1115	0.1071	0.1028
65	0.1766	0.1720	0.1673	0.1626	0.1579	0.1531	0.1484	0.1436	0.1388	0.1341	0.1293	0.1246	0.1200	0.1153	0.1108
66	0.1879	0.1832	0.1783	0.1735	0.1685	0.1636	0.1586	0.1536	0.1486	0.1437	0.1387	0.1338	0.1288	0.1239	0.1191
67	0.1997	0.1948	0.1898	0.1847	0.1796	0.1745	0.1693	0.1641	0.1589	0.1537	0.1485	0.1433	0.1381	0.1330	0.1279
68	0.2120	0.2069	0.2017	0.1965	0.1912	0.1859	0.1805	0.1751	0.1697	0.1642	0.1588	0.1534	0.1479	0.1425	0.1371
69	0.2248	0.2196	0.2143	0.2089	0.2034	0.1979	0.1923	0.1867	0.1811	0.1754	0.1697	0.1641	0.1584	0.1527	0.1470
70	0.2383	0.2329	0.2274	0.2219	0.2163	0.2106	0.2048	0.1990	0.1931	0.1872	0.1813	0.1754	0.1695	0.1635	0.1595
71	0.2523	0.2468	0.2412	0.2355	0.2297	0.2239	0.2179	0.2119	0.2058	0.1997	0.1936	0.1874	0.1812	0.1750	0.1688
72	0.2669	0.2613	0.2556	0.2498	0.2438	0.2378	0.2317	0.2255	0.2192	0.2129	0.2065	0.2001	0.1937	0.1872	0.1807
73	0.2821	0.2764	0.2705	0.2646	0.2585	0.2515	0.2460	0.2396	0.2332	0.2266	0.2200	0.2134	0.2067	0.2000	0.1932
74	0.2977	0.2919	0.2860	0.2799	0.2737	0.2673	0.2609	0.2543	0.2477	0.2410	0.2342	0.2273	0.2204	0.2134	0.2064
75	0.3138	0.3079	0.3027	0.2957	0.2894	0.2829	0.2763	0.2696	0.2628	0.2559	0.2489	0.2418	0.2346	0.2274	0.2201

Mortality: Participant UP84+1  
 Beneficiary UP84-4

Interest Rate: 6%

NCEW 66.67% Joint Survivor Reduction Factors (Healthy) with lifetime "Pop-Up" feature.  
 66.67% benefit continuation upon death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
55	0.2063	0.2043	0.2022	0.2000	0.1978	0.1954	0.1930	0.1905	0.1879	0.1852	0.1824	0.1796	0.1767	0.1736	0.1706
56	0.2174	0.2153	0.2132	0.2111	0.2088	0.2064	0.2040	0.2014	0.1988	0.1961	0.1933	0.1904	0.1874	0.1843	0.1811
57	0.2288	0.2268	0.2247	0.2225	0.2202	0.2178	0.2154	0.2128	0.2101	0.2074	0.2045	0.2016	0.1985	0.1954	0.1922
58	0.2407	0.2387	0.2366	0.2343	0.2320	0.2296	0.2271	0.2245	0.2218	0.2190	0.2162	0.2132	0.2101	0.2069	0.2036
59	0.2530	0.2510	0.2488	0.2466	0.2443	0.2419	0.2394	0.2367	0.2340	0.2312	0.2283	0.2252	0.2221	0.2189	0.2156
60	0.2657	0.2636	0.2615	0.2593	0.2569	0.2545	0.2520	0.2493	0.2466	0.2438	0.2408	0.2377	0.2346	0.2313	0.2279
61	0.2787	0.2767	0.2746	0.2723	0.2700	0.2676	0.2650	0.2624	0.2596	0.2567	0.2538	0.2507	0.2475	0.2442	0.2407
62	0.2922	0.2901	0.2880	0.2858	0.2834	0.2810	0.2784	0.2758	0.2730	0.2701	0.2671	0.2640	0.2608	0.2574	0.2540
63	0.3059	0.3039	0.3017	0.2995	0.2972	0.2947	0.2922	0.2895	0.2867	0.2838	0.2808	0.2777	0.2744	0.2711	0.2676
64	0.3199	0.3179	0.3158	0.3136	0.3112	0.3088	0.3062	0.3036	0.3008	0.2979	0.2949	0.2917	0.2885	0.2851	0.2816
65	0.3342	0.3322	0.3301	0.3279	0.3256	0.3231	0.3206	0.3179	0.3151	0.3122	0.3092	0.3061	0.3028	0.2994	0.2958
66	0.3487	0.3467	0.3446	0.3424	0.3401	0.3377	0.3351	0.3325	0.3297	0.3268	0.3238	0.3206	0.3173	0.3139	0.3104
67	0.3634	0.3614	0.3594	0.3572	0.3549	0.3524	0.3499	0.3473	0.3445	0.3416	0.3386	0.3354	0.3321	0.3287	0.3252
68	0.3784	0.3764	0.3744	0.3722	0.3699	0.3675	0.3650	0.3624	0.3596	0.3567	0.3537	0.3506	0.3473	0.3439	0.3403
69	0.3937	0.3918	0.3898	0.3876	0.3853	0.3830	0.3805	0.3779	0.3751	0.3722	0.3692	0.3661	0.3628	0.3594	0.3559
70	0.4094	0.4075	0.4055	0.4034	0.4011	0.3988	0.3963	0.3937	0.3910	0.3881	0.3851	0.3820	0.3788	0.3754	0.3719
71	0.4254	0.4235	0.4215	0.4194	0.4172	0.4149	0.4125	0.4099	0.4072	0.4044	0.4014	0.3983	0.3951	0.3917	0.3882
72	0.4417	0.4399	0.4379	0.4358	0.4336	0.4313	0.4289	0.4264	0.4237	0.4209	0.4180	0.4150	0.4117	0.4084	0.4049
73	0.4582	0.4564	0.4545	0.4524	0.4503	0.4480	0.4456	0.4431	0.4405	0.4378	0.4349	0.4318	0.4287	0.4253	0.4219
74	0.4749	0.4731	0.4712	0.4692	0.4671	0.4649	0.4625	0.4601	0.4575	0.4548	0.4519	0.4489	0.4458	0.4425	0.4391
75	0.4917	0.4899	0.4881	0.4861	0.4840	0.4818	0.4795	0.4771	0.4746	0.4719	0.4691	0.4661	0.4631	0.4598	0.4564

Mortality: Participant UP84+1  
 Beneficiary UP84-4

Interest Rate: 6%

NCEW 66.67% Joint Survivor Reduction Factors (Healthy) with lifetime "Pop-Up" feature.  
66.67% benefit continuation upon death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
55	0.1674	0.1642	0.1608	0.1575	0.1541	0.1506	0.1470	0.1434	0.1398	0.1362	0.1325	0.1288	0.1250	0.1213	0.1176
56	0.1779	0.1746	0.1712	0.1677	0.1642	0.1606	0.1570	0.1533	0.1495	0.1457	0.1419	0.1380	0.1341	0.1302	0.1263
57	0.1889	0.1855	0.1820	0.1784	0.1748	0.1711	0.1674	0.1635	0.1597	0.1557	0.1518	0.1477	0.1437	0.1396	0.1356
58	0.2003	0.1968	0.1932	0.1896	0.1859	0.1821	0.1782	0.1743	0.1703	0.1662	0.1621	0.1580	0.1538	0.1495	0.1453
59	0.2121	0.2086	0.2050	0.2013	0.1975	0.1936	0.1896	0.1856	0.1815	0.1773	0.1730	0.1687	0.1644	0.1600	0.1555
60	0.2244	0.2209	0.2172	0.2134	0.2095	0.2055	0.2015	0.1973	0.1931	0.1888	0.1844	0.1800	0.1755	0.1709	0.1664
61	0.2372	0.2336	0.2298	0.2260	0.2220	0.2180	0.2138	0.2096	0.2052	0.2008	0.1963	0.1918	0.1871	0.1824	0.1777
62	0.2504	0.2467	0.2429	0.2390	0.2350	0.2309	0.2266	0.2223	0.2179	0.2133	0.2087	0.2040	0.1993	0.1944	0.1895
63	0.2640	0.2603	0.2564	0.2525	0.2484	0.2442	0.2399	0.2354	0.2309	0.2263	0.2216	0.2168	0.2119	0.2069	0.2018
64	0.2779	0.2742	0.2703	0.2663	0.2621	0.2579	0.2535	0.2490	0.2444	0.2397	0.2349	0.2299	0.2249	0.2198	0.2146
65	0.2922	0.2884	0.2845	0.2804	0.2762	0.2719	0.2675	0.2629	0.2583	0.2535	0.2485	0.2435	0.2384	0.2332	0.2278
66	0.3067	0.3029	0.2989	0.2949	0.2906	0.2863	0.2818	0.2772	0.2724	0.2676	0.2626	0.2574	0.2522	0.2468	0.2414
67	0.3215	0.3177	0.3137	0.3096	0.3053	0.3009	0.2964	0.2917	0.2869	0.2820	0.2769	0.2717	0.2664	0.2609	0.2554
68	0.3366	0.3328	0.3288	0.3247	0.3204	0.3160	0.3114	0.3067	0.3019	0.2969	0.2917	0.2864	0.2810	0.2755	0.2698
69	0.3522	0.3484	0.3444	0.3402	0.3359	0.3315	0.3269	0.3222	0.3173	0.3122	0.3070	0.3017	0.2962	0.2905	0.2848
70	0.3682	0.3643	0.3603	0.3562	0.3519	0.3475	0.3429	0.3381	0.3332	0.3281	0.3228	0.3174	0.3119	0.3062	0.3003
71	0.3845	0.3807	0.3767	0.3726	0.3683	0.3639	0.3592	0.3545	0.3495	0.3444	0.3391	0.3337	0.3281	0.3223	0.3164
72	0.4013	0.3975	0.3935	0.3894	0.3851	0.3807	0.3760	0.3713	0.3663	0.3612	0.3559	0.3504	0.3448	0.3390	0.3330
73	0.4183	0.4145	0.4106	0.4065	0.4022	0.3978	0.3932	0.3884	0.3835	0.3783	0.3730	0.3675	0.3619	0.3560	0.3500
74	0.4355	0.4318	0.4279	0.4238	0.4196	0.4152	0.4106	0.4058	0.4009	0.3958	0.3905	0.3850	0.3793	0.3734	0.3674
75	0.4529	0.4492	0.4453	0.4413	0.4371	0.4328	0.4282	0.4235	0.4186	0.4135	0.4082	0.4027	0.3970	0.3912	0.3851

Mortality: Participant UP84+1  
Beneficiary UP84-4

Interest Rate: 6%

NCEW 66.67% Joint Survivor Reduction Factors (Healthy) with lifetime "Pop-Up" feature.  
 66.67% benefit continuation upon death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
55	0.1138	0.1101	0.1064	0.1027	0.0990	0.0954	0.0919	0.0883	0.0848	0.0814	0.0781	0.0748	0.0715	0.0684	0.0653
56	0.1224	0.1185	0.1146	0.1107	0.1068	0.1030	0.0992	0.0955	0.0918	0.0881	0.0846	0.0810	0.0776	0.0742	0.0709
57	0.1315	0.1273	0.1233	0.1192	0.1151	0.1111	0.1071	0.1031	0.0992	0.0953	0.0915	0.0878	0.0841	0.0805	0.0769
58	0.1410	0.1367	0.1324	0.1281	0.1239	0.1196	0.1154	0.1112	0.1070	0.1029	0.0989	0.0949	0.0910	0.0871	0.0834
59	0.1511	0.1466	0.1421	0.1376	0.1332	0.1287	0.1242	0.1198	0.1154	0.1111	0.1068	0.1026	0.0984	0.0943	0.0903
60	0.1617	0.1571	0.1524	0.1477	0.1430	0.1383	0.1337	0.1290	0.1244	0.1198	0.1153	0.1108	0.1064	0.1020	0.0977
61	0.1729	0.1680	0.1632	0.1583	0.1534	0.1485	0.1436	0.1387	0.1339	0.1291	0.1243	0.1195	0.1149	0.1102	0.1057
62	0.1846	0.1795	0.1745	0.1694	0.1643	0.1592	0.1541	0.1490	0.1439	0.1388	0.1338	0.1288	0.1239	0.1190	0.1141
63	0.1967	0.1684	0.1863	0.1810	0.1757	0.1704	0.1651	0.1597	0.1544	0.1491	0.1438	0.1386	0.1333	0.1282	0.1231
64	0.2093	0.2040	0.1986	0.1931	0.1876	0.1821	0.1765	0.1710	0.1654	0.1599	0.1543	0.1488	0.1434	0.1379	0.1325
65	0.2224	0.2169	0.2113	0.2057	0.2000	0.1943	0.1885	0.1827	0.1769	0.1711	0.1653	0.1596	0.1538	0.1481	0.1424
66	0.2358	0.2302	0.2244	0.2186	0.2128	0.2068	0.2009	0.1949	0.1888	0.1828	0.1768	0.1707	0.1647	0.1587	0.1527
67	0.2497	0.2439	0.2380	0.2320	0.2260	0.2199	0.2137	0.2075	0.2012	0.1949	0.1887	0.1824	0.1761	0.1698	0.1635
68	0.2640	0.2581	0.2520	0.2459	0.2397	0.2334	0.2270	0.2206	0.2141	0.2076	0.2011	0.1945	0.1880	0.1814	0.1749
69	0.2789	0.2728	0.2667	0.2604	0.2540	0.2476	0.2410	0.2344	0.2277	0.2210	0.2142	0.2074	0.2006	0.1937	0.1869
70	0.2943	0.2882	0.2819	0.2755	0.2690	0.2623	0.2556	0.2488	0.2419	0.2350	0.2280	0.2210	0.2139	0.2068	0.2019
71	0.3103	0.3041	0.2977	0.2912	0.2845	0.2778	0.2709	0.2639	0.2568	0.2497	0.2425	0.2352	0.2279	0.2205	0.2131
72	0.3268	0.3205	0.3140	0.3074	0.3007	0.2938	0.2867	0.2796	0.2724	0.2650	0.2576	0.2501	0.2426	0.2349	0.2272
73	0.3438	0.3374	0.3309	0.3242	0.3173	0.3094	0.3031	0.2959	0.2885	0.2810	0.2734	0.2657	0.2579	0.2500	0.2420
74	0.3612	0.3547	0.3481	0.3413	0.3344	0.3273	0.3200	0.3126	0.3051	0.2974	0.2896	0.2818	0.2738	0.2656	0.2575
75	0.3788	0.3724	0.3666	0.3589	0.3519	0.3447	0.3373	0.3298	0.3222	0.3144	0.3064	0.2984	0.2902	0.2819	0.2734

Mortality: Participant UP84+1  
 Beneficiary UP84-4

Interest Rate: 6%

NCEW 75% Joint Survivor Reduction Factors (health) with lifetime "Pop-up" feature.  
 75% benefit continuation upon death of Participant. Restoration of benefit to participant upon beneficiary's death.

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
55	0.2262	0.2241	0.2218	0.2195	0.2171	0.2146	0.2120	0.2093	0.2065	0.2036	0.2007	0.1976	0.1944	0.1912	0.1879
56	0.2380	0.2359	0.2337	0.2313	0.2289	0.2264	0.2238	0.2210	0.2182	0.2153	0.2123	0.2092	0.2060	0.2027	0.1993
57	0.2503	0.2481	0.2459	0.2435	0.2411	0.2386	0.2359	0.2332	0.2303	0.2274	0.2243	0.2212	0.2179	0.2146	0.2111
58	0.2629	0.2607	0.2585	0.2561	0.2537	0.2511	0.2485	0.2457	0.2428	0.2399	0.2368	0.2336	0.2303	0.2269	0.2234
59	0.2759	0.2737	0.2715	0.2691	0.2667	0.2641	0.2614	0.2587	0.2558	0.2528	0.2497	0.2464	0.2431	0.2397	0.2361
60	0.2893	0.2871	0.2849	0.2825	0.2801	0.2775	0.2748	0.2720	0.2691	0.2661	0.2630	0.2597	0.2564	0.2529	0.2493
61	0.3030	0.3009	0.2986	0.2963	0.2938	0.2913	0.2886	0.2858	0.2829	0.2798	0.2767	0.2734	0.2701	0.2665	0.2629
62	0.3171	0.3150	0.3127	0.3104	0.3079	0.3054	0.3027	0.2999	0.2970	0.2939	0.2908	0.2875	0.2841	0.2806	0.2769
63	0.3314	0.3293	0.3271	0.3248	0.3223	0.3198	0.3171	0.3143	0.3114	0.3084	0.3052	0.3019	0.2985	0.2950	0.2913
64	0.3461	0.3440	0.3418	0.3394	0.3370	0.3345	0.3318	0.3290	0.3261	0.3231	0.3199	0.3166	0.3132	0.3097	0.3060
65	0.3609	0.3588	0.3566	0.3543	0.3519	0.3494	0.3467	0.3440	0.3411	0.3381	0.3349	0.3316	0.3282	0.3246	0.3209
66	0.3759	0.3738	0.3717	0.3694	0.3670	0.3645	0.3619	0.3591	0.3562	0.3532	0.3501	0.3468	0.3434	0.3398	0.3361
67	0.3911	0.3890	0.3869	0.3846	0.3823	0.3798	0.3771	0.3744	0.3715	0.3686	0.3654	0.3622	0.3588	0.3552	0.3515
68	0.4065	0.4044	0.4023	0.4001	0.3978	0.3953	0.3927	0.3900	0.3871	0.3842	0.3811	0.3778	0.3744	0.3709	0.3672
69	0.4222	0.4202	0.4181	0.4159	0.4136	0.4111	0.4086	0.4059	0.4031	0.4001	0.3971	0.3938	0.3905	0.3870	0.3833
70	0.4382	0.4362	0.4342	0.4320	0.4297	0.4273	0.4248	0.4221	0.4193	0.4164	0.4134	0.4102	0.4069	0.4034	0.3997
71	0.4544	0.4525	0.4505	0.4483	0.4461	0.4437	0.4412	0.4386	0.4359	0.4330	0.4300	0.4268	0.4236	0.4201	0.4165
72	0.4709	0.4690	0.4670	0.4650	0.4628	0.4604	0.4580	0.4554	0.4527	0.4499	0.4469	0.4438	0.4405	0.4371	0.4336
73	0.4876	0.4857	0.4838	0.4817	0.4796	0.4773	0.4749	0.4723	0.4697	0.4669	0.4640	0.4609	0.4577	0.4543	0.4508
74	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.4683
75	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.4985	0.4955	0.4924	0.4892	0.4858

Mortality: Participant UP84+1  
 Beneficiary UP84-4

Interest: 6%

NCEW 75% Joint Survivor Reduction Factors (health) with lietime "Pop-up" feature.  
 75% benefit continuation upon death of Participant. Restoration of benefit to participant participant upon beneficiary's death.

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
55	0.1844	0.1810	0.1774	0.1737	0.1700	0.1663	0.1624	0.1585	0.1546	0.1506	0.1466	0.1426	0.1385	0.1344	0.1303
56	0.1958	0.1922	0.1886	0.1848	0.1810	0.1771	0.1732	0.1692	0.1651	0.1610	0.1568	0.1526	0.1484	0.1442	0.1399
57	0.2076	0.2039	0.2002	0.1964	0.1925	0.1885	0.1844	0.1803	0.1761	0.1718	0.1675	0.1632	0.1588	0.1544	0.1499
58	0.2198	0.2161	0.2123	0.2084	0.2044	0.2003	0.1961	0.1919	0.1876	0.1832	0.1788	0.1743	0.1697	0.1651	0.1605
59	0.2325	0.2287	0.2248	0.2209	0.2168	0.2126	0.2084	0.2040	0.1996	0.1951	0.1905	0.1859	0.1812	0.1764	0.1716
60	0.2456	0.2418	0.2379	0.2338	0.2297	0.2254	0.2211	0.2166	0.2121	0.2075	0.2028	0.1980	0.1932	0.1883	0.1833
61	0.2592	0.2553	0.2513	0.2472	0.2430	0.2387	0.2343	0.2298	0.2251	0.2204	0.2156	0.2107	0.2057	0.2007	0.1955
62	0.2731	0.2693	0.2652	0.2611	0.2568	0.2524	0.2479	0.2433	0.2386	0.2338	0.2288	0.2238	0.2187	0.2135	0.2083
63	0.2875	0.2836	0.2795	0.2753	0.2710	0.2665	0.2620	0.2573	0.2525	0.2476	0.2426	0.2374	0.2322	0.2269	0.2215
64	0.3022	0.2982	0.2941	0.2899	0.2855	0.2810	0.2764	0.2717	0.2668	0.2618	0.2567	0.2515	0.2461	0.2407	0.2351
65	0.3171	0.3131	0.3090	0.3048	0.3004	0.2959	0.2912	0.2864	0.2815	0.2764	0.2712	0.2659	0.2604	0.2549	0.2492
66	0.3323	0.3283	0.3242	0.3199	0.3155	0.3109	0.3062	0.3014	0.2964	0.2913	0.2860	0.2806	0.2750	0.2694	0.2636
67	0.3477	0.3437	0.3396	0.3353	0.3309	0.3263	0.3215	0.3167	0.3116	0.3064	0.3011	0.2956	0.2900	0.2843	0.2784
68	0.3634	0.3594	0.3553	0.3510	0.3466	0.3420	0.3372	0.3323	0.3272	0.3220	0.3166	0.3111	0.3054	0.2996	0.2936
69	0.3795	0.3755	0.3714	0.3671	0.3627	0.3581	0.3533	0.3484	0.3433	0.3380	0.3326	0.3270	0.3213	0.3154	0.3094
70	0.3960	0.3920	0.3879	0.3836	0.3792	0.3746	0.3698	0.3649	0.3598	0.3545	0.3491	0.3435	0.3377	0.3317	0.3256
71	0.4127	0.4088	0.4048	0.4005	0.3961	0.3915	0.3868	0.3818	0.3767	0.3715	0.3660	0.3604	0.3545	0.3486	0.3424
72	0.4298	0.4260	0.4219	0.4177	0.4133	0.4088	0.4040	0.3991	0.3940	0.3888	0.3833	0.3777	0.3718	0.3658	0.3596
73	0.4472	0.4433	0.4393	0.4352	0.4308	0.4263	0.4216	0.4167	0.4116	0.4064	0.4009	0.3953	0.3895	0.3834	0.3772
74	0.4646	0.4608	0.4569	0.4528	0.4485	0.4440	0.4393	0.4345	0.4295	0.4243	0.4188	0.4132	0.4074	0.4014	0.3952
75	0.4822	0.4785	0.4746	0.4705	0.4663	0.4618	0.4572	0.4524	0.4475	0.4423	0.4369	0.4313	0.4255	0.4195	0.4133

Mortality: Participant UP84+1  
 Beneficiary UP84-4

Interest: 6%

NCEW 75% Joint Survivor Reduction Factors (health) with lifetime "Pop-up" feature.  
 75% benefit continuation upon death of Participant. Restoration of benefit to participant upon beneficiary's death.

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
55	0.1263	0.1222	0.1181	0.1141	0.1101	0.1061	0.1022	0.0983	0.0944	0.0907	0.0870	0.0833	0.0798	0.0763	0.0729
56	0.1356	0.1313	0.1271	0.1228	0.1186	0.1144	0.1102	0.1061	0.1021	0.0981	0.0941	0.0902	0.0864	0.0827	0.0791
57	0.1455	0.1410	0.1365	0.1321	0.1276	0.1232	0.1188	0.1145	0.1102	0.1060	0.1018	0.0976	0.0936	0.0896	0.0857
58	0.1559	0.1512	0.1465	0.1419	0.1372	0.1326	0.1280	0.1234	0.1188	0.1143	0.1099	0.1055	0.1012	0.0970	0.0928
59	0.1668	0.1620	0.1571	0.1522	0.1473	0.1425	0.1376	0.1328	0.1280	0.1233	0.1186	0.1140	0.1094	0.1049	0.1005
60	0.1783	0.1733	0.1682	0.1631	0.1580	0.1530	0.1479	0.1428	0.1378	0.1328	0.1278	0.1230	0.1181	0.1133	0.1086
61	0.1904	0.1851	0.1799	0.1746	0.1693	0.1640	0.1587	0.1534	0.1481	0.1429	0.1377	0.1325	0.1274	0.1223	0.1173
62	0.2029	0.1975	0.1921	0.1866	0.1811	0.1756	0.1700	0.1645	0.1590	0.1535	0.1480	0.1426	0.1372	0.1319	0.1266
63	0.2160	0.2104	0.2048	0.1991	0.1934	0.1877	0.1819	0.1762	0.1704	0.1646	0.1589	0.1532	0.1476	0.1419	0.1364
64	0.2295	0.2238	0.2180	0.2121	0.2062	0.2003	0.1943	0.1883	0.1823	0.1763	0.1703	0.1644	0.1584	0.1525	0.1466
65	0.2434	0.2376	0.2316	0.2256	0.2195	0.2134	0.2072	0.2010	0.1947	0.1885	0.1822	0.1760	0.1698	0.1636	0.1574
66	0.2577	0.2517	0.2456	0.2394	0.2332	0.2268	0.2204	0.2140	0.2075	0.2011	0.1946	0.1881	0.1816	0.1751	0.1686
67	0.2724	0.2662	0.2600	0.2537	0.2472	0.2407	0.2341	0.2275	0.2208	0.2141	0.2073	0.2006	0.1938	0.1870	0.1803
68	0.2875	0.2812	0.2749	0.2684	0.2618	0.2551	0.2484	0.2415	0.2346	0.2277	0.2207	0.2137	0.2066	0.1996	0.1925
69	0.3031	0.2968	0.2903	0.2837	0.2770	0.2701	0.2632	0.2562	0.2491	0.2419	0.2347	0.2274	0.2201	0.2128	0.2054
70	0.3193	0.3129	0.3063	0.2996	0.2927	0.2858	0.2787	0.2715	0.2642	0.2568	0.2494	0.2419	0.2343	0.2267	0.2191
71	0.3360	0.3295	0.3229	0.3161	0.3091	0.3020	0.2948	0.2874	0.2799	0.2724	0.2648	0.2570	0.2492	0.2414	0.2335
72	0.3532	0.3467	0.3399	0.3330	0.3260	0.3188	0.3114	0.3039	0.2963	0.2886	0.2808	0.2729	0.2648	0.2567	0.2486
73	0.3708	0.3642	0.3574	0.3505	0.3433	0.3360	0.3286	0.3210	0.3132	0.3054	0.2974	0.2892	0.2810	0.2727	0.2643
74	0.3887	0.3821	0.3753	0.3683	0.3611	0.3537	0.3462	0.3385	0.3306	0.3226	0.3145	0.3062	0.2978	0.2892	0.2806
75	0.4069	0.4003	0.3934	0.3864	0.3792	0.3717	0.3641	0.3564	0.3484	0.3403	0.3320	0.3236	0.3150	0.3063	0.2974

Mortality: Participant UP84+1  
 Beneficiary UP84-4

Interest: 6%



NCEW 100% Joint Survivor Factors (Healthy) with lifetime "Pop-Up" feature.  
 100% benefit continuation upon death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
55	0.2804	0.2780	0.2754	0.2727	0.2699	0.2670	0.2640	0.2609	0.2576	0.2542	0.2508	0.2472	0.2435	0.2397	0.2357
56	0.2941	0.2916	0.2890	0.2864	0.2836	0.2807	0.2776	0.2745	0.2712	0.2678	0.2643	0.2607	0.2570	0.2531	0.2491
57	0.3080	0.3056	0.3030	0.3003	0.2976	0.2946	0.2916	0.2885	0.2852	0.2818	0.2783	0.2746	0.2709	0.2670	0.2630
58	0.3223	0.3198	0.3173	0.3146	0.3119	0.3090	0.3059	0.3028	0.2995	0.2961	0.2926	0.2889	0.2852	0.2812	0.2772
59	0.3369	0.3345	0.3319	0.3293	0.3265	0.3237	0.3206	0.3175	0.3142	0.3108	0.3073	0.3037	0.2999	0.2959	0.2919
60	0.3518	0.3494	0.3469	0.3443	0.3415	0.3387	0.3357	0.3326	0.3293	0.3259	0.3224	0.3187	0.3149	0.3110	0.3069
61	0.3670	0.3646	0.3621	0.3595	0.3568	0.3540	0.3510	0.3479	0.3447	0.3413	0.3378	0.3341	0.3303	0.3264	0.3223
62	0.3824	0.3800	0.3776	0.3750	0.3723	0.3695	0.3666	0.3635	0.3603	0.3569	0.3535	0.3498	0.3460	0.3421	0.3380
63	0.3980	0.3957	0.3933	0.3907	0.3881	0.3853	0.3824	0.3793	0.3761	0.3728	0.3694	0.3657	0.3620	0.3581	0.3540
64	0.4137	0.4114	0.4091	0.4066	0.4040	0.4012	0.3983	0.3953	0.3922	0.3889	0.3855	0.3819	0.3781	0.3743	0.3702
65	0.4295	0.4273	0.4250	0.4225	0.4200	0.4173	0.4144	0.4115	0.4083	0.4051	0.4017	0.3981	0.3944	0.3906	0.3866
66	0.4454	0.4432	0.4409	0.4385	0.4360	0.4333	0.4305	0.4276	0.4245	0.4213	0.4180	0.4145	0.4108	0.4070	0.4030
67	0.4613	0.4592	0.4569	0.4546	0.4521	0.4495	0.4467	0.4438	0.4408	0.4376	0.4343	0.4309	0.4273	0.4235	0.4195
68	0.4773	0.4752	0.4730	0.4707	0.4683	0.4657	0.4630	0.4602	0.4572	0.4541	0.4508	0.4474	0.4439	0.4401	0.4362
69	0.4934	0.4914	0.4893	0.4870	0.4846	0.4821	0.4795	0.4767	0.4738	0.4707	0.4675	0.4642	0.4607	0.4570	0.4532
70	N/A	N/A	N/A	N/A	N/A	0.4987	0.4961	0.4934	0.4906	0.4876	0.4844	0.4811	0.4777	0.4741	0.4703
71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.4982	0.4949	0.4913	0.4876
72	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*N/A: Reduction over 50% not allowed under IRS rules.

Mortality: Participant UP84+1  
 Beneficiary UP84-4

Interest Rate: 6%

NCEW 100% Joint Survivor Factors (Healthy) with lifetime "Pop-Up" feature.  
 100% benefit continuation upon death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
55	0.2317	0.2276	0.2233	0.2190	0.2145	0.2100	0.2054	0.2008	0.1960	0.1912	0.1864	0.1815	0.1765	0.1716	0.1666
56	0.2450	0.2408	0.2365	0.2321	0.2276	0.2230	0.2183	0.2135	0.2086	0.2037	0.1987	0.1937	0.1885	0.1834	0.1782
57	0.2588	0.2546	0.2502	0.2457	0.2411	0.2364	0.2316	0.2268	0.2218	0.2167	0.2116	0.2064	0.2011	0.1958	0.1904
58	0.2730	0.2687	0.2643	0.2598	0.2551	0.2503	0.2455	0.2405	0.2354	0.2302	0.2249	0.2196	0.2142	0.2087	0.2032
59	0.2877	0.2833	0.2789	0.2743	0.2696	0.2647	0.2598	0.2547	0.2495	0.2442	0.2389	0.2334	0.2278	0.2222	0.2165
60	0.3027	0.2983	0.2938	0.2892	0.2845	0.2796	0.2745	0.2694	0.2641	0.2588	0.2533	0.2477	0.2420	0.2362	0.2304
61	0.3181	0.3137	0.3092	0.3046	0.2998	0.2948	0.2898	0.2845	0.2792	0.2737	0.2682	0.2625	0.2567	0.2508	0.2448
62	0.3338	0.3294	0.3249	0.3202	0.3154	0.3105	0.3053	0.3001	0.2947	0.2892	0.2835	0.2777	0.2718	0.2658	0.2597
63	0.3498	0.3454	0.3409	0.3362	0.3314	0.3264	0.3213	0.3160	0.3105	0.3049	0.2992	0.2934	0.2873	0.2812	0.2750
64	0.3660	0.3617	0.3571	0.3525	0.3476	0.3426	0.3375	0.3322	0.3267	0.3210	0.3153	0.3093	0.3033	0.2971	0.2907
65	0.3824	0.3781	0.3736	0.3689	0.3641	0.3591	0.3539	0.3486	0.3431	0.3374	0.3316	0.3256	0.3195	0.3132	0.3068
66	0.3989	0.3946	0.3901	0.3854	0.3806	0.3756	0.3705	0.3652	0.3597	0.3540	0.3481	0.3421	0.3359	0.3296	0.3231
67	0.4154	0.4112	0.4067	0.4021	0.3973	0.3924	0.3872	0.3819	0.3764	0.3707	0.3648	0.3588	0.3526	0.3462	0.3396
68	0.4322	0.4280	0.4236	0.4190	0.4142	0.4093	0.4042	0.3989	0.3934	0.3877	0.3819	0.3758	0.3696	0.3632	0.3566
69	0.4492	0.4450	0.4407	0.4361	0.4314	0.4265	0.4215	0.4162	0.4107	0.4051	0.3992	0.3932	0.3870	0.3805	0.3739
70	0.4664	0.4623	0.4580	0.4535	0.4489	0.4440	0.4390	0.4338	0.4284	0.4228	0.4169	0.4109	0.4047	0.3983	0.3917
71	0.4838	0.4797	0.4755	0.4711	0.4665	0.4618	0.4568	0.4516	0.4463	0.4407	0.4349	0.4290	0.4228	0.4164	0.4098
72	N/A	0.4973	0.4932	0.4889	0.4844	0.4797	0.4748	0.4697	0.4644	0.4589	0.4532	0.4473	0.4411	0.4348	0.4282
73	N/A	N/A	N/A	N/A	N/A	0.4977	0.4929	0.4878	0.4826	0.4772	0.4716	0.4657	0.4596	0.4533	0.4468
74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.4956	0.4900	0.4842	0.4782	0.4720	0.4656
75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.4969	0.4907	0.4844

\*N/A: Reduction over 50% not allowed under IRS rules.

Mortality: Participant UP84+1  
 Beneficiary UP84-4

Interest Rate: 6%

NCEW 100% Joint Survivor Factors (Healthy) with lifetime "Pop-Up" feature.  
 100% benefit continuation upon death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
55	0.1615	0.1565	0.1515	0.1465	0.1416	0.1366	0.1317	0.1269	0.1221	0.1173	0.1127	0.1081	0.1036	0.0992	0.0948
56	0.1730	0.1678	0.1625	0.1573	0.1521	0.1469	0.1418	0.1367	0.1316	0.1266	0.1217	0.1168	0.1120	0.1073	0.1027
57	0.1850	0.1796	0.1741	0.1687	0.1632	0.1578	0.1524	0.1470	0.1417	0.1365	0.1312	0.1261	0.1210	0.1160	0.1111
58	0.1976	0.1919	0.1863	0.1806	0.1749	0.1693	0.1636	0.1580	0.1524	0.1469	0.1414	0.1359	0.1306	0.1253	0.1200
59	0.2107	0.2049	0.1990	0.1932	0.1873	0.1814	0.1755	0.1696	0.1637	0.1579	0.1521	0.1464	0.1407	0.1351	0.1296
60	0.2244	0.2184	0.2124	0.2063	0.2002	0.1940	0.1879	0.1818	0.1756	0.1696	0.1635	0.1575	0.1515	0.1456	0.1398
61	0.2387	0.2325	0.2263	0.2200	0.2137	0.2073	0.2010	0.1946	0.1882	0.1818	0.1755	0.1692	0.1629	0.1567	0.1506
62	0.2534	0.2471	0.2407	0.2342	0.2277	0.2212	0.2146	0.2079	0.2013	0.1947	0.1881	0.1815	0.1749	0.1684	0.1620
63	0.2686	0.2330	0.2556	0.2490	0.2423	0.2355	0.2287	0.2219	0.2150	0.2081	0.2012	0.1944	0.1875	0.1807	0.1739
64	0.2842	0.2777	0.2710	0.2642	0.2573	0.2503	0.2433	0.2363	0.2292	0.2220	0.2149	0.2078	0.2006	0.1935	0.1864
65	0.3002	0.2935	0.2867	0.2797	0.2727	0.2656	0.2584	0.2511	0.2438	0.2365	0.2291	0.2217	0.2142	0.2068	0.1994
66	0.3164	0.3096	0.3027	0.2956	0.2885	0.2812	0.2738	0.2663	0.2588	0.2512	0.2436	0.2359	0.2283	0.2205	0.2128
67	0.3329	0.3260	0.3190	0.3118	0.3045	0.2971	0.2896	0.2819	0.2742	0.2664	0.2586	0.2507	0.2427	0.2347	0.2267
68	0.3498	0.3428	0.3357	0.3285	0.3210	0.3135	0.3058	0.2980	0.2901	0.2821	0.2741	0.2659	0.2577	0.2495	0.2412
69	0.3671	0.3601	0.3529	0.3456	0.3381	0.3304	0.3226	0.3147	0.3066	0.2985	0.2902	0.2819	0.2734	0.2649	0.2564
70	0.3848	0.3778	0.3706	0.3632	0.3556	0.3479	0.3400	0.3319	0.3237	0.3154	0.3070	0.2985	0.2898	0.2811	0.2751
71	0.4029	0.3959	0.3887	0.3812	0.3736	0.3658	0.3578	0.3497	0.3414	0.3330	0.3244	0.3157	0.3068	0.2979	0.2888
72	0.4214	0.4144	0.4071	0.3997	0.3920	0.3842	0.3762	0.3680	0.3596	0.3510	0.3423	0.3335	0.3245	0.3153	0.3061
73	0.4400	0.4331	0.4258	0.4184	0.4108	0.4020	0.3949	0.3866	0.3781	0.3695	0.3607	0.3517	0.3426	0.3333	0.3239
74	0.4589	0.4519	0.4447	0.4374	0.4297	0.4219	0.4138	0.4055	0.3971	0.3884	0.3795	0.3704	0.3612	0.3517	0.3421
75	0.4777	0.4709	0.4647	0.4564	0.4488	0.4410	0.4330	0.4247	0.4162	0.4075	0.3986	0.3894	0.3801	0.3706	0.3608

Mortality: Participant UP84+1  
 Beneficiary UP84-4

Interest Rate: 6%

NCEW 50% Joint Survivor Factors (Disabled) with lifetime "Pop-Up"  
 50% benefit continuation at death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
25	0.2168	0.2155	0.2141	0.2127	0.2112	0.2096	0.2080	0.2064	0.2047	0.2030	0.2012	0.1993	0.1975	0.1955	0.1935
26	0.2112	0.2098	0.2084	0.2070	0.2055	0.2039	0.2023	0.2006	0.1989	0.1972	0.1954	0.1935	0.1916	0.1896	0.1876
27	0.2061	0.2047	0.2033	0.2018	0.2003	0.1987	0.1971	0.1954	0.1937	0.1919	0.1901	0.1882	0.1863	0.1843	0.1823
28	0.2018	0.2004	0.1990	0.1975	0.1959	0.1943	0.1927	0.1910	0.1893	0.1875	0.1856	0.1837	0.1818	0.1797	0.1777
29	0.1984	0.1970	0.1955	0.1940	0.1925	0.1908	0.1892	0.1875	0.1857	0.1839	0.1820	0.1801	0.1781	0.1760	0.1740
30	0.1959	0.1945	0.1930	0.1915	0.1899	0.1883	0.1866	0.1849	0.1831	0.1812	0.1793	0.1774	0.1754	0.1733	0.1712
31	0.1945	0.1931	0.1916	0.1901	0.1885	0.1868	0.1851	0.1833	0.1815	0.1796	0.1777	0.1757	0.1737	0.1716	0.1694
32	0.1942	0.1927	0.1912	0.1897	0.1880	0.1864	0.1846	0.1828	0.1810	0.1791	0.1771	0.1751	0.1730	0.1709	0.1687
33	0.1948	0.1934	0.1918	0.1902	0.1886	0.1869	0.1851	0.1833	0.1814	0.1795	0.1775	0.1755	0.1734	0.1712	0.1690
34	0.1965	0.1950	0.1934	0.1918	0.1902	0.1884	0.1866	0.1848	0.1829	0.1809	0.1789	0.1768	0.1747	0.1725	0.1702
35	0.1990	0.1975	0.1959	0.1943	0.1926	0.1909	0.1891	0.1872	0.1853	0.1833	0.1812	0.1791	0.1769	0.1747	0.1724
36	0.2024	0.2008	0.1992	0.1976	0.1959	0.1941	0.1923	0.1904	0.1884	0.1864	0.1843	0.1822	0.1800	0.1777	0.1754
37	0.2063	0.2048	0.2032	0.2015	0.1998	0.1980	0.1962	0.1942	0.1923	0.1902	0.1881	0.1859	0.1837	0.1814	0.1790
38	0.2108	0.2093	0.2076	0.2060	0.2042	0.2024	0.2005	0.1986	0.1965	0.1945	0.1923	0.1901	0.1878	0.1855	0.1831
39	0.2156	0.2141	0.2124	0.2107	0.2090	0.2071	0.2052	0.2032	0.2012	0.1991	0.1969	0.1947	0.1924	0.1900	0.1876
40	0.2208	0.2192	0.2176	0.2159	0.2141	0.2122	0.2103	0.2083	0.2062	0.2041	0.2019	0.1996	0.1973	0.1949	0.1924
41	0.2262	0.2246	0.2230	0.2212	0.2194	0.2175	0.2156	0.2136	0.2115	0.2093	0.2071	0.2048	0.2024	0.2000	0.1975
42	0.2319	0.2303	0.2286	0.2269	0.2250	0.2232	0.2212	0.2191	0.2170	0.2148	0.2126	0.2103	0.2078	0.2054	0.2028
43	0.2377	0.2361	0.2344	0.2327	0.2308	0.2289	0.2269	0.2249	0.2227	0.2205	0.2182	0.2159	0.2134	0.2109	0.2083
44	0.2438	0.2422	0.2405	0.2387	0.2368	0.2349	0.2329	0.2308	0.2287	0.2264	0.2241	0.2217	0.2192	0.2167	0.2141
45	0.2501	0.2484	0.2467	0.2449	0.2430	0.2411	0.2391	0.2370	0.2348	0.2325	0.2302	0.2278	0.2253	0.2227	0.2200
46	0.2566	0.2550	0.2532	0.2514	0.2496	0.2476	0.2455	0.2434	0.2412	0.2389	0.2366	0.2341	0.2316	0.2290	0.2263
47	0.2635	0.2618	0.2601	0.2583	0.2564	0.2544	0.2524	0.2502	0.2480	0.2457	0.2433	0.2408	0.2383	0.2357	0.2329
48	0.2706	0.2690	0.2672	0.2654	0.2635	0.2615	0.2595	0.2573	0.2551	0.2527	0.2503	0.2478	0.2453	0.2426	0.2398
49	0.2780	0.2763	0.2745	0.2727	0.2708	0.2688	0.2667	0.2645	0.2623	0.2600	0.2575	0.2550	0.2524	0.2497	0.2469
50	0.2854	0.2838	0.2820	0.2802	0.2782	0.2762	0.2741	0.2719	0.2697	0.2673	0.2649	0.2623	0.2597	0.2570	0.2542
51	0.2930	0.2913	0.2895	0.2877	0.2858	0.2837	0.2816	0.2794	0.2772	0.2748	0.2723	0.2698	0.2671	0.2644	0.2615
52	0.3005	0.2988	0.2971	0.2952	0.2933	0.2913	0.2891	0.2869	0.2846	0.2823	0.2798	0.2772	0.2745	0.2718	0.2689
53	0.3081	0.3064	0.3046	0.3027	0.3008	0.2988	0.2439	0.2944	0.2921	0.2897	0.2872	0.2846	0.2819	0.2791	0.2763
54	0.3156	0.3139	0.3121	0.3102	0.3083	0.3062	0.3041	0.3019	0.2996	0.2971	0.2946	0.2920	0.2893	0.2865	0.2836
55	0.3230	0.3213	0.3195	0.3176	0.3157	0.3136	0.3115	0.3093	0.3069	0.3045	0.3020	0.2994	0.2966	0.2938	0.2909
56	0.3302	0.3285	0.3268	0.3249	0.3229	0.3209	0.3187	0.3165	0.3141	0.3117	0.3092	0.3065	0.3038	0.3010	0.2980
57	0.3373	0.3356	0.3338	0.3319	0.3299	0.3279	0.3257	0.3235	0.3211	0.3187	0.3161	0.3135	0.3107	0.3079	0.3049
58	0.3440	0.3423	0.3405	0.3386	0.3367	0.3346	0.3324	0.3302	0.3278	0.3254	0.3228	0.3202	0.3174	0.3145	0.3115
59	0.3505	0.3488	0.3470	0.3451	0.3431	0.3410	0.3389	0.3366	0.3342	0.3318	0.3292	0.3265	0.3238	0.3209	0.3179
60	0.3565	0.3548	0.3530	0.3511	0.3492	0.3471	0.3449	0.3426	0.3403	0.3378	0.3352	0.3325	0.3297	0.3268	0.3238
61	0.3624	0.3607	0.3589	0.3570	0.3550	0.3529	0.3507	0.3485	0.3461	0.3436	0.3410	0.3383	0.3355	0.3326	0.3295
62	0.3680	0.3663	0.3645	0.3626	0.3606	0.3585	0.3563	0.3541	0.3517	0.3492	0.3466	0.3439	0.3410	0.3381	0.3350
63	0.3735	0.3718	0.3700	0.3681	0.3661	0.3640	0.3618	0.3595	0.3571	0.3546	0.3520	0.3493	0.3465	0.3435	0.3404
64	0.3791	0.3774	0.3756	0.3737	0.3717	0.3696	0.3675	0.3652	0.3627	0.3602	0.3576	0.3549	0.3520	0.3490	0.3459
65	0.3851	0.3834	0.3813	0.3797	0.3777	0.3756	0.3734	0.3711	0.3687	0.3661	0.3635	0.3607	0.3579	0.3549	0.3518

Mortality: Participant PBGC SS Disabled Males  
 Beneficiary UP84-4  
 Interest Rate: 6%

NCEW 50% Joint Survivor Factors (Disabled) with lifetime "Pop-Up"  
 50% benefit continuation at death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
25	0.1915	0.1894	0.1873	0.1851	0.1829	0.1807	0.1784	0.1760	0.1737	0.1712	0.1688	0.1663	0.1638	0.1612	0.1586
26	0.1856	0.1835	0.1814	0.1792	0.1770	0.1747	0.1724	0.1700	0.1677	0.1652	0.1628	0.1603	0.1578	0.1552	0.1526
27	0.1802	0.1781	0.1759	0.1737	0.1715	0.1692	0.1669	0.1645	0.1621	0.1597	0.1572	0.1547	0.1522	0.1496	0.1470
28	0.1756	0.1735	0.1713	0.1691	0.1668	0.1645	0.1621	0.1597	0.1573	0.1549	0.1524	0.1498	0.1473	0.1447	0.1421
29	0.1718	0.1697	0.1675	0.1652	0.1629	0.1606	0.1582	0.1558	0.1533	0.1508	0.1483	0.1457	0.1432	0.1406	0.1379
30	0.1690	0.1668	0.1646	0.1623	0.1600	0.1576	0.1552	0.1527	0.1502	0.1477	0.1451	0.1425	0.1399	0.1373	0.1346
31	0.1672	0.1650	0.1627	0.1604	0.1580	0.1556	0.1531	0.1506	0.1481	0.1455	0.1429	0.1403	0.1374	0.1350	0.1322
32	0.1665	0.1642	0.1619	0.1595	0.1571	0.1546	0.1521	0.1496	0.1470	0.1444	0.1418	0.1391	0.1364	0.1336	0.1309
33	0.1667	0.1644	0.1620	0.1596	0.1572	0.1546	0.1521	0.1495	0.1469	0.1442	0.1415	0.1388	0.1360	0.1332	0.1304
34	0.1679	0.1656	0.1632	0.1607	0.1582	0.1557	0.1530	0.1504	0.1477	0.1450	0.1422	0.1394	0.1366	0.1338	0.1309
35	0.1701	0.1677	0.1652	0.1627	0.1602	0.1576	0.1549	0.1522	0.1495	0.1467	0.1439	0.1410	0.1381	0.1352	0.1323
36	0.1730	0.1705	0.1680	0.1655	0.1629	0.1602	0.1575	0.1548	0.1520	0.1491	0.1463	0.1433	0.1404	0.1374	0.1344
37	0.1766	0.1741	0.1715	0.1689	0.1663	0.1636	0.1608	0.1580	0.1552	0.1523	0.1493	0.1463	0.1433	0.1403	0.1372
38	0.1806	0.1781	0.1755	0.1729	0.1702	0.1674	0.1646	0.1617	0.1588	0.1558	0.1528	0.1498	0.1467	0.1436	0.1404
39	0.1851	0.1825	0.1798	0.1772	0.1744	0.1716	0.1687	0.1658	0.1628	0.1598	0.1567	0.1536	0.1505	0.1473	0.1440
40	0.1898	0.1872	0.1845	0.1818	0.1790	0.1761	0.1732	0.1702	0.1672	0.1641	0.1610	0.1578	0.1546	0.1513	0.1480
41	0.1949	0.1922	0.1895	0.1867	0.1839	0.1809	0.1780	0.1749	0.1718	0.1687	0.1655	0.1622	0.1589	0.1556	0.1522
42	0.2002	0.1975	0.1947	0.1919	0.1890	0.1860	0.1830	0.1799	0.1767	0.1735	0.1703	0.1670	0.1636	0.1602	0.1567
43	0.2057	0.2029	0.2001	0.1972	0.1943	0.1913	0.1882	0.1850	0.1818	0.1785	0.1752	0.1718	0.1684	0.1649	0.1614
44	0.2114	0.2086	0.2057	0.2028	0.1998	0.1968	0.1936	0.1904	0.1871	0.1838	0.1804	0.1770	0.1734	0.1699	0.1663
45	0.2178	0.2145	0.2116	0.2086	0.2056	0.2025	0.1993	0.1960	0.1927	0.1893	0.1858	0.1823	0.1787	0.1751	0.1714
46	0.2235	0.2207	0.2178	0.2147	0.2117	0.2085	0.2052	0.2019	0.1985	0.1951	0.1916	0.1880	0.1843	0.1806	0.1768
47	0.2301	0.2272	0.2243	0.2212	0.2181	0.2149	0.2116	0.2082	0.2048	0.2012	0.1977	0.1940	0.1903	0.1865	0.1827
48	0.2370	0.2341	0.2311	0.2280	0.2248	0.2215	0.2182	0.2148	0.2113	0.2077	0.2041	0.2003	0.1966	0.1927	0.1888
49	0.2441	0.2411	0.2381	0.2349	0.2317	0.2284	0.2250	0.2215	0.2180	0.2144	0.2107	0.2069	0.2030	0.1991	0.1951
50	0.2513	0.2483	0.2452	0.2420	0.2388	0.2354	0.2320	0.2285	0.2249	0.2212	0.2174	0.2136	0.2097	0.2057	0.2016
51	0.2586	0.2556	0.2525	0.2493	0.2460	0.2426	0.2391	0.2355	0.2319	0.2276	0.2243	0.2204	0.2165	0.2124	0.2083
52	0.2659	0.2629	0.2598	0.2565	0.2532	0.2498	0.2462	0.2426	0.2389	0.2351	0.2313	0.2273	0.2233	0.2192	0.2150
53	0.2733	0.2702	0.2670	0.2638	0.2604	0.2569	0.2534	0.2497	0.2460	0.2421	0.2382	0.2342	0.2301	0.2259	0.2217
54	0.2806	0.2775	0.2743	0.2710	0.2676	0.2641	0.2605	0.2568	0.2530	0.2491	0.2452	0.2411	0.2369	0.2327	0.2284
55	0.2879	0.2847	0.2815	0.2782	0.2747	0.2712	0.2675	0.2638	0.2600	0.2560	0.2520	0.2479	0.2437	0.2394	0.2350
56	0.2950	0.2918	0.2885	0.2852	0.2817	0.2781	0.2745	0.2707	0.2668	0.2629	0.2588	0.2546	0.2504	0.2460	0.2416
57	0.3018	0.2987	0.2954	0.2920	0.2895	0.2849	0.2812	0.2774	0.2734	0.2694	0.2653	0.2611	0.2568	0.2524	0.2479
58	0.3084	0.3052	0.3019	0.2985	0.2950	0.2913	0.2876	0.2837	0.2798	0.2757	0.2715	0.2673	0.2629	0.2584	0.2539
59	0.3147	0.3115	0.3082	0.3047	0.3012	0.2975	0.2937	0.2898	0.2858	0.2817	0.2775	0.2732	0.2688	0.2642	0.2596
60	0.3207	0.3174	0.3141	0.3106	0.3070	0.3033	0.2995	0.2955	0.2915	0.2873	0.2831	0.2787	0.2742	0.2696	0.2650
61	0.3264	0.3231	0.3197	0.3162	0.3126	0.3088	0.3050	0.3010	0.2969	0.2927	0.2884	0.2840	0.2794	0.2748	0.2889
62	0.3318	0.3285	0.3251	0.3216	0.3180	0.3142	0.3103	0.3063	0.3022	0.2979	0.2935	0.2890	0.2844	0.2797	0.2749
63	0.3372	0.3339	0.3305	0.3269	0.3232	0.3194	0.3155	0.3114	0.3072	0.3029	0.2985	0.2940	0.2893	0.2846	0.2797
64	0.3427	0.3394	0.3359	0.3323	0.3286	0.3247	0.3208	0.3167	0.3125	0.3081	0.3036	0.2990	0.2943	0.2895	0.2845
65	0.3485	0.3452	0.3417	0.3380	0.3343	0.3304	0.3264	0.3223	0.3180	0.3136	0.3091	0.3044	0.2996	0.2947	0.2897

Mortality: Participant PBGC SS Disabled Males  
 Beneficiary UP84-4  
 Interest Rate: 6%

NCEW 50% Joint Survivor Factors (Disabled) with lifetime "Pop-Up"  
 50% benefit continuation at death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
25	0.1560	0.1534	0.1507	0.1480	0.1452	0.1425	0.1397	0.1369	0.1340	0.1312	0.1284	0.1250	0.1213	0.1174	0.1147
26	0.1500	0.1474	0.1447	0.1420	0.1393	0.1365	0.1338	0.1310	0.1282	0.1254	0.1226	0.1193	0.1155	0.1114	0.1070
27	0.1444	0.1418	0.1391	0.1364	0.1337	0.1310	0.1282	0.1255	0.1227	0.1200	0.1172	0.1144	0.1112	0.1077	0.1040
28	0.1395	0.1368	0.1341	0.1314	0.1287	0.1260	0.1233	0.1205	0.1178	0.1150	0.1123	0.1095	0.1068	0.1041	0.1010
29	0.1353	0.1326	0.1299	0.1272	0.1245	0.1217	0.1190	0.1162	0.1135	0.1107	0.1080	0.1052	0.1025	0.0997	0.0972
30	0.1319	0.1292	0.1265	0.1238	0.1210	0.1182	0.1155	0.1127	0.1099	0.1072	0.1044	0.1017	0.0989	0.0961	0.0934
31	0.1295	0.1268	0.1240	0.1212	0.1184	0.1156	0.1128	0.1100	0.1072	0.1044	0.1016	0.0989	0.0961	0.0933	0.0905
32	0.1281	0.1253	0.1225	0.1196	0.1168	0.1140	0.1111	0.1083	0.1054	0.1026	0.0998	0.0969	0.0941	0.0913	0.0885
33	0.1276	0.1247	0.1218	0.1192	0.1160	0.1131	0.1102	0.1073	0.1044	0.1016	0.0987	0.0958	0.0930	0.0901	0.0873
34	0.1280	0.1251	0.1221	0.1192	0.1162	0.1133	0.1103	0.1073	0.0987	0.1014	0.0985	0.0955	0.0926	0.0897	0.0868
35	0.1293	0.1263	0.1233	0.1203	0.1172	0.1142	0.1112	0.1081	0.1051	0.1021	0.0991	0.0961	0.0931	0.0901	0.0872
36	0.1314	0.1283	0.1252	0.1221	0.1190	0.1159	0.1128	0.1097	0.1066	0.1035	0.1004	0.0973	0.0942	0.0912	0.0882
37	0.1341	0.1309	0.1278	0.1246	0.1214	0.1182	0.1150	0.1118	0.1086	0.1055	0.1023	0.0991	0.0960	0.0928	0.0897
38	0.1372	0.1340	0.1308	0.1275	0.1243	0.1210	0.1177	0.1144	0.1111	0.1079	0.1046	0.1014	0.0981	0.0949	0.0917
39	0.1408	0.1375	0.1341	0.1308	0.1275	0.1241	0.1207	0.1174	0.1140	0.1106	0.1073	0.1039	0.1006	0.0973	0.0940
40	0.1447	0.1413	0.1379	0.1345	0.1310	0.1276	0.1241	0.1206	0.1172	0.1137	0.1103	0.1068	0.1034	0.1000	0.0966
41	0.1488	0.1453	0.1418	0.1383	0.1348	0.1313	0.1277	0.1241	0.1206	0.1170	0.1135	0.1099	0.1064	0.1029	0.0994
42	0.1532	0.1497	0.1461	0.1425	0.1389	0.1352	0.1316	0.1279	0.1243	0.1206	0.1170	0.1133	0.1097	0.1060	0.1024
43	0.1578	0.1542	0.1504	0.1468	0.1431	0.1394	0.1356	0.1319	0.1281	0.1243	0.1206	0.1168	0.1131	0.1093	0.1056
44	0.1626	0.1589	0.1552	0.1514	0.1476	0.1438	0.1399	0.1360	0.1322	0.1283	0.1244	0.1206	0.1167	0.1129	0.1090
45	0.1677	0.1639	0.1600	0.1562	0.1523	0.1484	0.1444	0.1405	0.1365	0.1325	0.1285	0.1246	0.1206	0.1166	0.1126
46	0.1730	0.1692	0.1652	0.1613	0.1573	0.1533	0.1492	0.1452	0.1411	0.1370	0.1329	0.1288	0.1247	0.1206	0.1166
47	0.1788	0.1748	0.1708	0.1668	0.1627	0.1586	0.1544	0.1503	0.1461	0.1419	0.1377	0.1335	0.1293	0.1251	0.1209
48	0.1848	0.1808	0.1767	0.1726	0.1684	0.1642	0.1600	0.1557	0.1514	0.1471	0.1428	0.1385	0.1342	0.1298	0.1255
49	0.1911	0.1870	0.1828	0.1786	0.1743	0.1700	0.1657	0.1613	0.1569	0.1525	0.1481	0.1437	0.1393	0.1348	0.1303
50	0.1975	0.1933	0.1891	0.1848	0.1805	0.1761	0.1716	0.1672	0.1627	0.1582	0.1537	0.1491	0.1446	0.1400	0.1354
51	0.2041	0.1998	0.1955	0.1911	0.1867	0.1822	0.1777	0.1732	0.1686	0.1640	0.1593	0.1547	0.1500	0.1453	0.1407
52	0.2107	0.2064	0.2020	0.1975	0.1930	0.1884	0.1838	0.1792	0.1745	0.1698	0.1651	0.1603	0.1556	0.1508	0.1460
53	0.2173	0.2129	0.2085	0.2039	0.1993	0.1947	0.1900	0.1853	0.1805	0.1757	0.1709	0.1660	0.1612	0.1563	0.1514
54	0.2240	0.2195	0.2150	0.2104	0.2153	0.2010	0.1962	0.1914	0.1865	0.1816	0.1767	0.1718	0.1668	0.1618	0.1568
55	0.2306	0.2260	0.2214	0.2167	0.2120	0.2072	0.2023	0.1974	0.1925	0.1875	0.1825	0.1775	0.1724	0.1673	0.1622
56	0.2370	0.2324	0.2277	0.2230	0.2182	0.2133	0.2084	0.2034	0.1984	0.1933	0.1882	0.1831	0.1779	0.1727	0.1675
57	0.2433	0.2386	0.2339	0.2290	0.2242	0.2192	0.2142	0.2091	0.2040	0.1989	0.1937	0.1885	0.1832	0.1779	0.1726
58	0.2492	0.2445	0.2397	0.2348	0.2298	0.2248	0.2197	0.2146	0.2094	0.2041	0.1989	0.1936	0.1882	0.1829	0.1775
59	0.2549	0.2501	0.2452	0.2403	0.2352	0.2301	0.2249	0.2197	0.2145	0.2091	0.2038	0.1984	0.1930	0.1875	0.1820
60	0.2602	0.2553	0.2504	0.2453	0.2402	0.2350	0.2298	0.2245	0.2191	0.2137	0.2083	0.2028	0.1973	0.1917	0.1861
61	0.2652	0.2603	0.2552	0.2501	0.2449	0.2396	0.2343	0.2289	0.2235	0.2180	0.2125	0.2069	0.2013	0.1956	0.1900
62	0.2700	0.2650	0.2599	0.2547	0.2494	0.2440	0.2386	0.2331	0.2276	0.2220	0.2164	0.2107	0.2050	0.1993	0.1935
63	0.2747	0.2696	0.2644	0.2591	0.2537	0.2483	0.2428	0.2372	0.2315	0.2259	0.2201	0.2144	0.2085	0.2027	0.1968
64	0.2795	0.2743	0.2690	0.2636	0.2582	0.2526	0.2470	0.2413	0.2356	0.2298	0.2239	0.2180	0.2121	0.2061	0.2001
65	0.2846	0.2793	0.2739	0.2685	0.2629	0.2572	0.2515	0.2457	0.2399	0.2339	0.2280	0.2220	0.2159	0.2098	0.2037

Mortality: Participant PBGC SS Disabled Males  
 Beneficiary UP84-4  
 Interest Rate: 6%

NCEW 66.67% Joint Survivor Reduction Factors (Disabled) with lifetime "Pop-Up."  
 66.67% benefit continuation at death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
25	0.2696	0.2681	0.2664	0.2648	0.2630	0.2613	0.2594	0.2575	0.2555	0.2535	0.2514	0.2492	0.2470	0.2447	0.2424
26	0.2630	0.2615	0.2598	0.2581	0.2564	0.2546	0.2527	0.2507	0.2487	0.2467	0.2446	0.2424	0.2401	0.2378	0.2355
27	0.2571	0.2555	0.2539	0.2521	0.2504	0.2485	0.2466	0.2446	0.2426	0.2405	0.2384	0.2361	0.2339	0.2315	0.2291
28	0.2521	0.2505	0.2488	0.2470	0.2452	0.2434	0.2414	0.2394	0.2374	0.2352	0.2331	0.2308	0.2285	0.2261	0.2237
29	0.2481	0.2465	0.2447	0.2430	0.2411	0.2392	0.2373	0.2352	0.2331	0.2310	0.2288	0.2265	0.2241	0.2217	0.2192
30	0.2452	0.2436	0.2418	0.2400	0.2382	0.2362	0.2342	0.2322	0.2301	0.2279	0.2256	0.2233	0.2209	0.2185	0.2159
31	0.2436	0.2419	0.2401	0.2383	0.2364	0.2345	0.2324	0.2303	0.2282	0.2260	0.2237	0.2213	0.2189	0.2164	0.2138
32	0.2432	0.2415	0.2397	0.2378	0.2359	0.2339	0.2319	0.2298	0.2276	0.2253	0.2230	0.2206	0.2181	0.2156	0.2130
33	0.2439	0.2422	0.2404	0.2385	0.2366	0.2346	0.2325	0.2303	0.2281	0.2258	0.2235	0.2210	0.2185	0.2159	0.2133
34	0.2459	0.2441	0.2423	0.2404	0.2384	0.2364	0.2343	0.2321	0.2298	0.2275	0.2251	0.2226	0.2201	0.2175	0.2148
35	0.2489	0.2471	0.2452	0.2433	0.2413	0.2393	0.2372	0.2349	0.2327	0.2303	0.2279	0.2254	0.2228	0.2201	0.2174
36	0.2528	0.2510	0.2491	0.2472	0.2452	0.2431	0.2409	0.2387	0.2364	0.2340	0.2315	0.2290	0.2264	0.2237	0.2209
37	0.2574	0.2556	0.2538	0.2518	0.2498	0.2477	0.2455	0.2432	0.2409	0.2385	0.2360	0.2334	0.2308	0.2280	0.2252
38	0.2626	0.2608	0.2589	0.2570	0.2549	0.2528	0.2506	0.2483	0.2460	0.2435	0.2410	0.2384	0.2357	0.2329	0.2301
39	0.2682	0.2664	0.2645	0.2625	0.2605	0.2583	0.2561	0.2538	0.2514	0.2489	0.2464	0.2438	0.2410	0.2382	0.2354
40	0.2742	0.2724	0.2705	0.2685	0.2664	0.2643	0.2620	0.2597	0.2573	0.2548	0.2522	0.2496	0.2468	0.2440	0.2411
41	0.2805	0.2786	0.2767	0.2747	0.2726	0.2704	0.2682	0.2658	0.2634	0.2609	0.2583	0.2556	0.2528	0.2500	0.2470
42	0.2870	0.2852	0.2832	0.2812	0.2791	0.2769	0.2747	0.2723	0.2698	0.2673	0.2647	0.2620	0.2592	0.2563	0.2533
43	0.2937	0.2918	0.2899	0.2879	0.2858	0.2836	0.2813	0.2789	0.2764	0.2739	0.2712	0.2685	0.2657	0.2627	0.2597
44	0.3006	0.2988	0.2968	0.2948	0.2927	0.2905	0.2882	0.2858	0.2833	0.2807	0.2780	0.2753	0.2724	0.2695	0.2664
45	0.3078	0.3059	0.3039	0.3019	0.2998	0.2976	0.2952	0.2928	0.2903	0.2877	0.2851	0.2823	0.2794	0.2764	0.2733
46	0.3152	0.3133	0.3114	0.3093	0.3072	0.3050	0.3026	0.3002	0.2977	0.2951	0.2924	0.2896	0.2867	0.2837	0.2806
47	0.3230	0.3211	0.3191	0.3171	0.3149	0.3127	0.3104	0.3079	0.3054	0.3028	0.3001	0.2973	0.2944	0.2913	0.2882
48	0.3310	0.3291	0.3272	0.3251	0.3230	0.3207	0.3184	0.3160	0.3134	0.3108	0.3081	0.3052	0.3023	0.2993	0.2961
49	0.3392	0.3373	0.3354	0.3333	0.3312	0.3289	0.3266	0.3241	0.3216	0.3190	0.3162	0.3134	0.3104	0.3074	0.3042
50	0.3475	0.3456	0.3437	0.3416	0.3395	0.3373	0.3349	0.3325	0.3299	0.3273	0.3245	0.3217	0.3187	0.3156	0.3124
51	0.3559	0.3540	0.3521	0.3500	0.3479	0.3456	0.3433	0.3408	0.3383	0.3356	0.3329	0.3300	0.3270	0.3239	0.3208
52	0.3642	0.3624	0.3604	0.3584	0.3562	0.3540	0.3516	0.3492	0.3466	0.3440	0.3412	0.3383	0.3354	0.3323	0.3290
53	0.3725	0.3706	0.3687	0.3666	0.3645	0.3623	0.3600	0.3575	0.3549	0.3522	0.3495	0.3466	0.3436	0.3405	0.3373
54	0.3807	0.3789	0.3769	0.3749	0.3727	0.3705	0.3682	0.3657	0.3631	0.3605	0.3577	0.3548	0.3518	0.3487	0.3455
55	0.3888	0.3869	0.3850	0.3830	0.3808	0.3786	0.3762	0.3738	0.3712	0.3686	0.3658	0.3629	0.3599	0.3568	0.3536
56	0.3967	0.3948	0.3929	0.3909	0.3887	0.3865	0.3842	0.3817	0.3792	0.3765	0.3737	0.3708	0.3678	0.3647	0.3614
57	0.4043	0.4024	0.4005	0.3985	0.3963	0.3941	0.3918	0.3893	0.3868	0.3841	0.3813	0.3784	0.3754	0.3723	0.3690
58	0.4115	0.4097	0.4077	0.4057	0.4036	0.4014	0.3990	0.3966	0.3940	0.3914	0.3886	0.3857	0.3827	0.3796	0.3763
59	0.4184	0.4166	0.4147	0.4126	0.4105	0.4083	0.4060	0.4035	0.4010	0.3983	0.3955	0.3926	0.3896	0.3865	0.3832
60	0.4249	0.4231	0.4212	0.4191	0.4170	0.4148	0.4125	0.4100	0.4075	0.4048	0.4020	0.3991	0.3961	0.3930	0.3897
61	0.4311	0.4293	0.4274	0.4254	0.4232	0.4210	0.4187	0.4163	0.4137	0.4110	0.4083	0.4053	0.4023	0.3992	0.3959
62	0.4371	0.4352	0.4333	0.4313	0.4292	0.4270	0.4247	0.4222	0.4197	0.4170	0.4142	0.4113	0.4083	0.4051	0.4018
63	0.4429	0.4411	0.4392	0.4372	0.4351	0.4328	0.4305	0.4281	0.4255	0.4229	0.4201	0.4172	0.4141	0.4109	0.4076
64	0.4488	0.4470	0.4451	0.4431	0.4410	0.4388	0.4365	0.4340	0.4315	0.4288	0.4260	0.4231	0.4201	0.4169	0.4136
65	0.4550	0.4532	0.4511	0.4494	0.4473	0.4451	0.4427	0.4403	0.4377	0.4351	0.4323	0.4294	0.4263	0.4231	0.4198

Mortality: Participant PBGC SS Disabled Males  
 Beneficiary UP84-4  
 Interest Rate: 6%

NCEW 66.67% Joint Survivor Reduction Factors (Disabled) with lifetime "Pop-Up.  
66.67% benefit continuation at death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
25	0.2400	0.2376	0.2351	0.2325	0.2299	0.2272	0.2245	0.2217	0.2189	0.2160	0.2131	0.2101	0.2071	0.2040	0.2009
26	0.2330	0.2306	0.2280	0.2254	0.2228	0.2201	0.2173	0.2145	0.2117	0.2088	0.2059	0.2029	0.1998	0.1968	0.1936
27	0.2267	0.2242	0.2216	0.2190	0.2163	0.2136	0.2108	0.2080	0.2051	0.2022	0.1992	0.1962	0.1931	0.1900	0.1869
28	0.2212	0.2186	0.2160	0.2134	0.2107	0.2079	0.2051	0.2022	0.1993	0.1963	0.1933	0.1903	0.1872	0.1841	0.1809
29	0.2167	0.2141	0.2115	0.2088	0.2060	0.2032	0.2003	0.1974	0.1945	0.1915	0.1884	0.1853	0.1822	0.1790	0.1758
30	0.2134	0.2107	0.2080	0.2053	0.2025	0.1996	0.1967	0.1937	0.1907	0.1877	0.1846	0.1814	0.1783	0.1750	0.1718
31	0.2112	0.2085	0.2058	0.2030	0.2001	0.1972	0.1943	0.1912	0.1882	0.1851	0.1819	0.1787	0.1752	0.1722	0.1689
32	0.2103	0.2076	0.2048	0.2020	0.1990	0.1961	0.1931	0.1900	0.1869	0.1837	0.1805	0.1772	0.1739	0.1706	0.1672
33	0.2106	0.2078	0.2050	0.2021	0.1991	0.1961	0.1930	0.1899	0.1867	0.1835	0.1802	0.1768	0.1735	0.1701	0.1666
34	0.2120	0.2092	0.2063	0.2034	0.2004	0.1973	0.1942	0.1910	0.1877	0.1844	0.1811	0.1777	0.1742	0.1707	0.1672
35	0.2146	0.2117	0.2088	0.2058	0.2027	0.1996	0.1964	0.1931	0.1898	0.1865	0.1830	0.1796	0.1761	0.1725	0.1689
36	0.2181	0.2152	0.2122	0.2091	0.2060	0.2028	0.1996	0.1962	0.1929	0.1894	0.1859	0.1824	0.1788	0.1752	0.1715
37	0.2223	0.2194	0.2164	0.2132	0.2101	0.2068	0.2035	0.2001	0.1967	0.1932	0.1896	0.1860	0.1824	0.1787	0.1749
38	0.2272	0.2242	0.2211	0.2179	0.2147	0.2114	0.2080	0.2046	0.2011	0.1975	0.1939	0.1902	0.1865	0.1827	0.1789
39	0.2324	0.2294	0.2262	0.2230	0.2198	0.2164	0.2130	0.2095	0.2059	0.2023	0.1986	0.1948	0.1910	0.1872	0.1832
40	0.2380	0.2350	0.2318	0.2286	0.2252	0.2218	0.2183	0.2148	0.2112	0.2075	0.2037	0.1999	0.1960	0.1920	0.1880
41	0.2440	0.2409	0.2376	0.2344	0.2310	0.2275	0.2240	0.2204	0.2167	0.2129	0.2091	0.2052	0.2012	0.1972	0.1931
42	0.2502	0.2471	0.2438	0.2405	0.2371	0.2335	0.2300	0.2263	0.2225	0.2187	0.2148	0.2109	0.2068	0.2027	0.1986
43	0.2566	0.2534	0.2501	0.2468	0.2433	0.2397	0.2361	0.2324	0.2286	0.2247	0.2208	0.2167	0.2126	0.2084	0.2042
44	0.2633	0.2601	0.2567	0.2533	0.2498	0.2462	0.2425	0.2387	0.2349	0.2309	0.2269	0.2228	0.2186	0.2144	0.2100
45	0.2707	0.2669	0.2635	0.2601	0.2565	0.2529	0.2492	0.2453	0.2414	0.2374	0.2333	0.2292	0.2249	0.2206	0.2162
46	0.2774	0.2741	0.2707	0.2672	0.2636	0.2599	0.2561	0.2523	0.2483	0.2442	0.2401	0.2359	0.2315	0.2271	0.2227
47	0.2850	0.2817	0.2782	0.2747	0.2711	0.2673	0.2635	0.2596	0.2556	0.2515	0.2473	0.2430	0.2386	0.2341	0.2296
48	0.2929	0.2895	0.2861	0.2825	0.2788	0.2751	0.2712	0.2672	0.2632	0.2590	0.2548	0.2504	0.2460	0.2414	0.2368
49	0.3009	0.2976	0.2941	0.2905	0.2868	0.2830	0.2791	0.2751	0.2710	0.2668	0.2624	0.2580	0.2536	0.2490	0.2443
50	0.3092	0.3058	0.3022	0.2986	0.2949	0.2911	0.2871	0.2831	0.2789	0.2747	0.2703	0.2659	0.2613	0.2567	0.2519
51	0.3174	0.3140	0.3105	0.3069	0.3031	0.2992	0.2953	0.2912	0.2870	0.2820	0.2783	0.2738	0.2692	0.2645	0.2597
52	0.3257	0.3223	0.3187	0.3151	0.3113	0.3074	0.3034	0.2993	0.2951	0.2907	0.2863	0.2817	0.2771	0.2723	0.2675
53	0.3339	0.3305	0.3269	0.3233	0.3194	0.3155	0.3115	0.3074	0.3031	0.2987	0.2942	0.2896	0.2849	0.2801	0.2752
54	0.3421	0.3387	0.3351	0.3314	0.3276	0.3236	0.3196	0.3154	0.3111	0.3067	0.3022	0.2975	0.2928	0.2879	0.2830
55	0.3502	0.3467	0.3431	0.3394	0.3356	0.3316	0.3275	0.3233	0.3190	0.3146	0.3100	0.3053	0.3005	0.2956	0.2906
56	0.3581	0.3546	0.3510	0.3472	0.3434	0.3394	0.3353	0.3311	0.3267	0.3222	0.3176	0.3129	0.3081	0.3031	0.2981
57	0.3657	0.3622	0.3585	0.3548	0.3631	0.3469	0.3428	0.3385	0.3341	0.3296	0.3250	0.3203	0.3154	0.3104	0.3053
58	0.3729	0.3694	0.3658	0.3620	0.3581	0.3541	0.3499	0.3456	0.3412	0.3367	0.3320	0.3272	0.3223	0.3173	0.3121
59	0.3798	0.3763	0.3726	0.3689	0.3649	0.3609	0.3567	0.3524	0.3480	0.3434	0.3387	0.3339	0.3289	0.3238	0.3186
60	0.3863	0.3827	0.3791	0.3753	0.3713	0.3673	0.3630	0.3587	0.3542	0.3496	0.3449	0.3400	0.3350	0.3299	0.3246
61	0.3924	0.3889	0.3852	0.3814	0.3774	0.3733	0.3691	0.3647	0.3602	0.3556	0.3508	0.3459	0.3408	0.3357	0.3313
62	0.3984	0.3948	0.3911	0.3873	0.3833	0.3792	0.3749	0.3705	0.3660	0.3613	0.3565	0.3515	0.3464	0.3412	0.3358
63	0.4042	0.4006	0.3969	0.3930	0.3890	0.3849	0.3806	0.3762	0.3716	0.3669	0.3620	0.3570	0.3518	0.3465	0.3411
64	0.4101	0.4065	0.4028	0.3989	0.3949	0.3907	0.3864	0.3819	0.3773	0.3726	0.3676	0.3626	0.3574	0.3520	0.3465
65	0.4163	0.4127	0.4090	0.4051	0.4010	0.3968	0.3925	0.3880	0.3834	0.3786	0.3736	0.3685	0.3632	0.3578	0.3523

Mortality: Participant PBGC SS Disabled Males  
Beneficiary UP84-4

Interest Rate: 6%



NCEW 66.67% Joint Survivor Reduction Factors (Disabled) with lifetime "Pop-Up.  
66.67% benefit continuation at death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
25	0.1977	0.1945	0.1913	0.1880	0.1847	0.1813	0.1779	0.1745	0.1711	0.1676	0.1642	0.1600	0.1555	0.1507	0.1473
26	0.1905	0.1873	0.1840	0.1808	0.1775	0.1741	0.1708	0.1674	0.1640	0.1605	0.1571	0.1530	0.1483	0.1433	0.1378
27	0.1837	0.1805	0.1773	0.1740	0.1707	0.1673	0.1640	0.1606	0.1572	0.1538	0.1504	0.1469	0.1429	0.1387	0.1340
28	0.1777	0.1745	0.1712	0.1679	0.1646	0.1612	0.1579	0.1545	0.1511	0.1477	0.1443	0.1409	0.1374	0.1341	0.1302
29	0.1726	0.1693	0.1660	0.1627	0.1593	0.1560	0.1526	0.1492	0.1458	0.1424	0.1390	0.1356	0.1321	0.1287	0.1256
30	0.1685	0.1652	0.1618	0.1585	0.1551	0.1517	0.1483	0.1448	0.1414	0.1380	0.1345	0.1311	0.1277	0.1242	0.1208
31	0.1655	0.1622	0.1588	0.1553	0.1519	0.1485	0.1450	0.1415	0.1380	0.1346	0.1311	0.1276	0.1241	0.1207	0.1172
32	0.1638	0.1603	0.1569	0.1534	0.1499	0.1464	0.1429	0.1393	0.1358	0.1323	0.1287	0.1252	0.1217	0.1182	0.1147
33	0.1631	0.1596	0.1561	0.1454	0.1490	0.1454	0.1418	0.1382	0.1346	0.1310	0.1274	0.1238	0.1202	0.1166	0.1131
34	0.1637	0.1601	0.1565	0.1528	0.1492	0.1455	0.1418	0.1382	0.1274	0.1308	0.1271	0.1235	0.1198	0.1162	0.1125
35	0.1653	0.1616	0.1579	0.1542	0.1504	0.1467	0.1429	0.1392	0.1354	0.1316	0.1279	0.1241	0.1204	0.1166	0.1129
36	0.1678	0.1640	0.1603	0.1565	0.1526	0.1488	0.1449	0.1411	0.1372	0.1334	0.1295	0.1257	0.1218	0.1180	0.1142
37	0.1711	0.1673	0.1634	0.1595	0.1556	0.1516	0.1477	0.1437	0.1398	0.1358	0.1319	0.1279	0.1240	0.1201	0.1162
38	0.1750	0.1710	0.1671	0.1631	0.1591	0.1551	0.1510	0.1470	0.1429	0.1388	0.1348	0.1307	0.1267	0.1227	0.1186
39	0.1793	0.1753	0.1712	0.1671	0.1630	0.1589	0.1547	0.1506	0.1464	0.1422	0.1381	0.1339	0.1298	0.1256	0.1215
40	0.1840	0.1799	0.1758	0.1716	0.1674	0.1631	0.1589	0.1546	0.1503	0.1461	0.1418	0.1375	0.1333	0.1290	0.1248
41	0.1890	0.1848	0.1806	0.1763	0.1720	0.1677	0.1633	0.1589	0.1546	0.1502	0.1458	0.1414	0.1370	0.1326	0.1283
42	0.1943	0.1901	0.1857	0.1814	0.1770	0.1725	0.1681	0.1636	0.1591	0.1546	0.1501	0.1456	0.1411	0.1366	0.1321
43	0.1999	0.1955	0.1909	0.1866	0.1821	0.1776	0.1730	0.1684	0.1638	0.1592	0.1546	0.1499	0.1453	0.1407	0.1360
44	0.2057	0.2012	0.1967	0.1921	0.1875	0.1829	0.1782	0.1735	0.1688	0.1641	0.1593	0.1546	0.1498	0.1450	0.1403
45	0.2117	0.2072	0.2026	0.1979	0.1932	0.1885	0.1837	0.1789	0.1741	0.1692	0.1643	0.1594	0.1545	0.1496	0.1448
46	0.2181	0.2135	0.2088	0.2041	0.1993	0.1944	0.1896	0.1846	0.1797	0.1747	0.1697	0.1647	0.1597	0.1546	0.1496
47	0.2250	0.2203	0.2155	0.2107	0.2058	0.2008	0.1958	0.1908	0.1857	0.1807	0.1755	0.1704	0.1653	0.1601	0.1549
48	0.2321	0.2272	0.2225	0.2176	0.2126	0.2076	0.2025	0.1973	0.1922	0.1870	0.1817	0.1765	0.1712	0.1659	0.1606
49	0.2395	0.2347	0.2297	0.2247	0.2197	0.2145	0.2094	0.2041	0.1989	0.1935	0.1882	0.1828	0.1774	0.1720	0.1666
50	0.2471	0.2422	0.2372	0.2321	0.2269	0.2217	0.2165	0.2111	0.2058	0.2003	0.1949	0.1894	0.1839	0.1783	0.1728
51	0.2548	0.2498	0.2447	0.2396	0.2344	0.2291	0.2237	0.2183	0.2128	0.2073	0.2017	0.1961	0.1905	0.1848	0.1791
52	0.2625	0.2575	0.2523	0.2471	0.2418	0.2364	0.2310	0.2255	0.2199	0.2143	0.2086	0.2029	0.1972	0.1914	0.1856
53	0.2702	0.2656	0.2599	0.2546	0.2492	0.2438	0.2383	0.2327	0.2270	0.2213	0.2156	0.2098	0.2039	0.1980	0.1921
54	0.2779	0.2727	0.2675	0.2621	0.2568	0.2511	0.2455	0.2399	0.2341	0.2284	0.2225	0.2166	0.2107	0.2047	0.1987
55	0.2855	0.2803	0.2749	0.2695	0.2640	0.2584	0.2527	0.2470	0.2412	0.2353	0.2294	0.2234	0.2174	0.2113	0.2052
56	0.2929	0.2876	0.2822	0.2768	0.2712	0.2655	0.2598	0.2540	0.2481	0.2421	0.2361	0.2301	0.2240	0.2178	0.2115
57	0.3001	0.2947	0.2893	0.2837	0.2781	0.2724	0.2666	0.2607	0.2547	0.2487	0.2426	0.2365	0.2302	0.2240	0.2177
58	0.3068	0.3014	0.2959	0.2903	0.2846	0.2788	0.2730	0.2670	0.2610	0.2549	0.2487	0.2425	0.2362	0.2298	0.2234
59	0.3133	0.3078	0.3023	0.2966	0.2908	0.2850	0.2790	0.2730	0.2669	0.2607	0.2544	0.2481	0.2418	0.2353	0.2288
60	0.3192	0.3137	0.3081	0.3024	0.2965	0.2906	0.2846	0.2784	0.2723	0.2660	0.2597	0.2533	0.2468	0.2403	0.2337
61	0.3249	0.3193	0.3136	0.3078	0.3019	0.2959	0.2898	0.2836	0.2773	0.2710	0.2645	0.2581	0.2515	0.2449	0.2382
62	0.3303	0.3246	0.3189	0.3130	0.3070	0.3009	0.2947	0.2884	0.2821	0.2756	0.2691	0.2625	0.2559	0.2491	0.2424
63	0.3355	0.3298	0.3240	0.3180	0.3119	0.3057	0.2995	0.2931	0.2866	0.2801	0.2734	0.2667	0.2600	0.2531	0.2463
64	0.3409	0.3351	0.3292	0.3231	0.3170	0.3107	0.3043	0.2978	0.2912	0.2846	0.2778	0.2710	0.2641	0.2572	0.2502
65	0.3465	0.3407	0.3347	0.3286	0.3223	0.3159	0.3094	0.3028	0.2961	0.2894	0.2825	0.2756	0.2686	0.2615	0.2543

Mortality: Participant PBGC SS Disabled Males  
Beneficiary UP84-4  
Interest Rate: 6%

NCEW 75% Joint Survivor Reduction Factors (Disabled) with lifetime "Pop-up" feature.  
 75% benefit continuation upon death of Participant. Restoration of benefit to participant upon beneficiary's death.

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
25	0.2934	0.2918	0.2901	0.2884	0.2866	0.2848	0.2829	0.2810	0.2790	0.2770	0.2749	0.2728	0.2706	0.2684	0.2662
26	0.2865	0.2849	0.2832	0.2814	0.2796	0.2778	0.2758	0.2739	0.2718	0.2698	0.2677	0.2655	0.2633	0.2611	0.2589
27	0.2802	0.2786	0.2769	0.2751	0.2732	0.2714	0.2694	0.2674	0.2653	0.2633	0.2611	0.2589	0.2567	0.2545	0.2522
28	0.2749	0.2733	0.2715	0.2697	0.2678	0.2659	0.2639	0.2619	0.2598	0.2577	0.2555	0.2533	0.2510	0.2487	0.2464
29	0.2707	0.2690	0.2672	0.2654	0.2635	0.2615	0.2595	0.2574	0.2553	0.2532	0.2509	0.2487	0.2464	0.2440	0.2417
30	0.2677	0.2659	0.2641	0.2623	0.2603	0.2584	0.2563	0.2542	0.2521	0.2498	0.2476	0.2453	0.2429	0.2406	0.2382
31	0.2659	0.2642	0.2623	0.2604	0.2585	0.2565	0.2544	0.2522	0.2500	0.2478	0.2455	0.2432	0.2408	0.2384	0.2359
32	0.2655	0.2637	0.2619	0.2599	0.2580	0.2559	0.2538	0.2516	0.2494	0.2471	0.2448	0.2424	0.2399	0.2375	0.2350
33	0.2663	0.2645	0.2626	0.2607	0.2587	0.2566	0.2544	0.2522	0.2499	0.2476	0.2452	0.2428	0.2403	0.2378	0.2353
34	0.2683	0.2665	0.2646	0.2626	0.2606	0.2585	0.2563	0.2541	0.2518	0.2494	0.2470	0.2445	0.2420	0.2394	0.2368
35	0.2715	0.2697	0.2677	0.2658	0.2637	0.2616	0.2594	0.2571	0.2547	0.2523	0.2499	0.2474	0.2448	0.2422	0.2395
36	0.2756	0.2738	0.2718	0.2698	0.2677	0.2656	0.2634	0.2611	0.2587	0.2563	0.2538	0.2512	0.2486	0.2459	0.2432
37	0.2806	0.2787	0.2767	0.2747	0.2726	0.2704	0.2682	0.2659	0.2635	0.2610	0.2585	0.2559	0.2532	0.2505	0.2478
38	0.2861	0.2842	0.2822	0.2802	0.2780	0.2758	0.2736	0.2712	0.2688	0.2663	0.2637	0.2611	0.2584	0.2557	0.2528
39	0.2920	0.2901	0.2881	0.2860	0.2839	0.2817	0.2794	0.2770	0.2745	0.2720	0.2694	0.2668	0.2640	0.2612	0.2584
40	0.2983	0.2964	0.2944	0.2923	0.2902	0.2879	0.2856	0.2832	0.2807	0.2782	0.2756	0.2729	0.2701	0.2673	0.2644
41	0.3048	0.3029	0.3009	0.2988	0.2967	0.2944	0.2921	0.2897	0.2872	0.2846	0.2820	0.2792	0.2764	0.2736	0.2706
42	0.3117	0.3098	0.3078	0.3057	0.3035	0.3012	0.2989	0.2965	0.2939	0.2913	0.2887	0.2859	0.2831	0.2802	0.2772
43	0.3187	0.3187	0.3187	0.3187	0.3187	0.3187	0.3187	0.3187	0.3187	0.3187	0.3187	0.3187	0.3187	0.3187	0.2839
44	0.3260	0.3240	0.3220	0.3199	0.3177	0.3154	0.3130	0.3106	0.3080	0.3054	0.3027	0.2998	0.2969	0.2940	0.2909
45	0.3334	0.3315	0.3294	0.3273	0.3251	0.3228	0.3204	0.3180	0.3154	0.3127	0.3100	0.3072	0.3042	0.3012	0.2981
46	0.3411	0.3392	0.3372	0.3351	0.3329	0.3306	0.3282	0.3257	0.3231	0.3204	0.3177	0.3148	0.3119	0.3088	0.3057
47	0.3492	0.3473	0.3453	0.3432	0.3409	0.3386	0.3362	0.3337	0.3311	0.3285	0.3257	0.3228	0.3198	0.3168	0.3136
48	0.3576	0.3556	0.3536	0.3515	0.3493	0.3470	0.3446	0.3421	0.3395	0.3368	0.3340	0.3311	0.3281	0.3250	0.3219
49	0.3661	0.3641	0.3621	0.3600	0.3578	0.3555	0.3531	0.3506	0.3480	0.3453	0.3425	0.3396	0.3366	0.3335	0.3303
50	0.3747	0.3728	0.3707	0.3686	0.3664	0.3641	0.3617	0.3592	0.3566	0.3539	0.3511	0.3482	0.3451	0.3420	0.3388
51	0.3833	0.3814	0.3794	0.3773	0.3751	0.3728	0.3704	0.3679	0.3653	0.3625	0.3597	0.3568	0.3538	0.3506	0.3474
52	0.3919	0.3900	0.3880	0.3859	0.3837	0.3814	0.3790	0.3765	0.3739	0.3712	0.3683	0.3654	0.3624	0.3592	0.3560
53	0.4004	0.3985	0.3965	0.3944	0.3922	0.3899	0.3875	0.3850	0.3824	0.3797	0.3769	0.3739	0.3709	0.3677	0.3645
54	0.4088	0.4070	0.4050	0.4029	0.4007	0.3984	0.3960	0.3935	0.3909	0.3882	0.3853	0.3824	0.3794	0.3762	0.3729
55	0.4171	0.4152	0.4132	0.4112	0.4090	0.4067	0.4043	0.4018	0.3992	0.3965	0.3937	0.3907	0.3877	0.3845	0.3812
56	0.4252	0.4233	0.4213	0.4192	0.4171	0.4148	0.4124	0.4099	0.4073	0.4046	0.4018	0.3988	0.3958	0.3926	0.3893
57	0.4329	0.4310	0.4291	0.4270	0.4249	0.4226	0.4202	0.4177	0.4151	0.4124	0.4096	0.4066	0.4036	0.4004	0.3971
58	0.4403	0.4384	0.4365	0.4344	0.4323	0.4300	0.4276	0.4251	0.4225	0.4198	0.4170	0.4141	0.4110	0.4078	0.4045
59	0.4473	0.4455	0.4435	0.4415	0.4393	0.4371	0.4347	0.4322	0.4296	0.4269	0.4241	0.4211	0.4181	0.4149	0.4116
60	0.4539	0.4520	0.4501	0.4481	0.4459	0.4437	0.4413	0.4388	0.4362	0.4335	0.4307	0.4278	0.4247	0.4215	0.4182
61	0.4602	0.4583	0.4564	0.4544	0.4522	0.4500	0.4476	0.4451	0.4426	0.4399	0.4370	0.4341	0.4310	0.4278	0.4245
62	0.4662	0.4644	0.4625	0.4604	0.4583	0.4561	0.4537	0.4512	0.4486	0.4459	0.4431	0.4402	0.4371	0.4339	0.4305
63	0.4721	0.4703	0.4684	0.4663	0.4642	0.4620	0.4596	0.4572	0.4546	0.4519	0.4490	0.4461	0.4430	0.4398	0.4364
64	0.4781	0.4763	0.4744	0.4723	0.4702	0.4680	0.4656	0.4632	0.4606	0.4579	0.4551	0.4521	0.4490	0.4458	0.4425
65	0.4844	0.4826	0.4806	0.4786	0.4765	0.4743	0.4720	0.4695	0.4669	0.4642	0.4614	0.4585	0.4554	0.4521	0.4488

Mortality: Participant: PBGC Disabled Male  
 Beneficiary UP84-4

Interest: 6%

NCEW 75% Joint Survivor Reduction Factors (Disabled) with lifetime "Pop-up" feature.  
 75% benefit continuation upon death of Participant. Restoration of benefit to participant upon beneficiary's death.

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
25	0.2639	0.2617	0.2594	0.2571	0.2549	0.2526	0.2503	0.2481	0.2459	0.2438	0.2417	0.2397	0.2378	0.2359	0.2342
26	0.2566	0.2543	0.2520	0.2497	0.2474	0.2452	0.2429	0.2407	0.2385	0.2364	0.2343	0.2323	0.2304	0.2286	0.2269
27	0.2499	0.2476	0.2452	0.2429	0.2406	0.2383	0.2360	0.2338	0.2316	0.2295	0.2274	0.2254	0.2235	0.2217	0.2200
28	0.2441	0.2417	0.2394	0.2370	0.2346	0.2323	0.2300	0.2277	0.2255	0.2234	0.2213	0.2193	0.2174	0.2156	0.2139
29	0.2393	0.2369	0.2345	0.2321	0.2297	0.2273	0.2250	0.2227	0.2204	0.2183	0.2161	0.2141	0.2122	0.2104	0.2087
30	0.2357	0.2333	0.2308	0.2284	0.2259	0.2235	0.2211	0.2188	0.2165	0.2142	0.2121	0.2100	0.2080	0.2062	0.2045
31	0.2334	0.2309	0.2284	0.2259	0.2234	0.2209	0.2185	0.2161	0.2137	0.2114	0.2092	0.2071	0.2050	0.2031	0.2013
32	0.2324	0.2299	0.2273	0.2248	0.2222	0.2197	0.2171	0.2147	0.2122	0.2099	0.2076	0.2054	0.2033	0.2013	0.1994
33	0.2327	0.2301	0.2274	0.2248	0.2222	0.2196	0.2170	0.2144	0.2119	0.2095	0.2071	0.2048	0.2026	0.2006	0.1986
34	0.2342	0.2315	0.2288	0.2261	0.2234	0.2208	0.2181	0.2155	0.2129	0.2103	0.2079	0.2055	0.2032	0.2010	0.1990
35	0.2368	0.2341	0.2314	0.2286	0.2258	0.2231	0.2203	0.2176	0.2149	0.2123	0.2097	0.2073	0.2049	0.2026	0.2004
36	0.2405	0.2377	0.2349	0.2321	0.2292	0.2264	0.2236	0.2208	0.2180	0.2153	0.2126	0.2100	0.2075	0.2051	0.2028
37	0.2449	0.2421	0.2392	0.2363	0.2334	0.2305	0.2276	0.2247	0.2219	0.2190	0.2163	0.2136	0.2109	0.2084	0.2060
38	0.2500	0.2471	0.2442	0.2412	0.2382	0.2352	0.2322	0.2293	0.2263	0.2234	0.2205	0.2177	0.2149	0.2123	0.2097
39	0.2555	0.2525	0.2495	0.2465	0.2435	0.2404	0.2373	0.2343	0.2312	0.2282	0.2252	0.2223	0.2194	0.2166	0.2139
40	0.2614	0.2584	0.2554	0.2523	0.2491	0.2460	0.2428	0.2397	0.2365	0.2334	0.2303	0.2273	0.2243	0.2214	0.2185
41	0.2676	0.2646	0.2614	0.2583	0.2551	0.2519	0.2487	0.2454	0.2422	0.2389	0.2357	0.2326	0.2295	0.2264	0.2235
42	0.2741	0.2710	0.2679	0.2647	0.2614	0.2581	0.2548	0.2515	0.2481	0.2448	0.2415	0.2382	0.2350	0.2318	0.2287
43	0.2808	0.2777	0.2745	0.2712	0.2679	0.2645	0.2611	0.2577	0.2543	0.2509	0.2475	0.2441	0.2407	0.2374	0.2342
44	0.2878	0.2846	0.2813	0.2780	0.2746	0.2712	0.2677	0.2642	0.2607	0.2572	0.2537	0.2502	0.2467	0.2433	0.2399
45	0.2950	0.2917	0.2884	0.2850	0.2816	0.2781	0.2746	0.2710	0.2674	0.2638	0.2602	0.2566	0.2530	0.2494	0.2459
46	0.3025	0.2992	0.2958	0.2924	0.2889	0.2854	0.2818	0.2781	0.2745	0.2707	0.2670	0.2633	0.2596	0.2559	0.2523
47	0.3104	0.3071	0.3037	0.3002	0.2966	0.2930	0.2894	0.2856	0.2819	0.2781	0.2743	0.2705	0.2667	0.2629	0.2591
48	0.3186	0.3152	0.3118	0.3083	0.3047	0.3010	0.2973	0.2935	0.2897	0.2858	0.2819	0.2780	0.2741	0.2701	0.2662
49	0.3270	0.3236	0.3201	0.3165	0.3129	0.3092	0.3054	0.3015	0.2976	0.2937	0.2897	0.2857	0.2817	0.2776	0.2736
50	0.3355	0.3321	0.3286	0.3250	0.3213	0.3175	0.3137	0.3098	0.3058	0.3018	0.2977	0.2936	0.2895	0.2853	0.2812
51	0.3441	0.3406	0.3371	0.3335	0.3297	0.3259	0.3220	0.3181	0.3140	0.3100	0.3058	0.3016	0.2974	0.2932	0.2889
52	0.3526	0.3491	0.3456	0.3419	0.3382	0.3343	0.3304	0.3264	0.3223	0.3181	0.3139	0.3096	0.3053	0.3010	0.2966
53	0.3611	0.3576	0.3540	0.3503	0.3465	0.3427	0.3387	0.3346	0.3305	0.3263	0.3220	0.3176	0.3132	0.3088	0.3043
54	0.3695	0.3660	0.3624	0.3587	0.3549	0.3510	0.3469	0.3428	0.3387	0.3344	0.3300	0.3256	0.3211	0.3166	0.3121
55	0.3778	0.3743	0.3707	0.3669	0.3631	0.3591	0.3551	0.3509	0.3467	0.3424	0.3379	0.3335	0.3289	0.3243	0.3197
56	0.3859	0.3824	0.3787	0.3750	0.3711	0.3671	0.3630	0.3588	0.3546	0.3502	0.3457	0.3412	0.3365	0.3318	0.3271
57	0.3937	0.3901	0.3865	0.3827	0.3788	0.3748	0.3707	0.3664	0.3621	0.3577	0.3532	0.3485	0.3439	0.3391	0.3343
58	0.4011	0.3975	0.3939	0.3901	0.3861	0.3821	0.3779	0.3737	0.3693	0.3648	0.3603	0.3556	0.3508	0.3460	0.3411
59	0.4081	0.4046	0.4009	0.3971	0.3931	0.3891	0.3849	0.3806	0.3762	0.3716	0.3670	0.3623	0.3574	0.3525	0.3475
60	0.4147	0.4111	0.4074	0.4036	0.3996	0.3955	0.3913	0.3870	0.3825	0.3780	0.3733	0.3685	0.3636	0.3586	0.3535
61	0.4210	0.4174	0.4137	0.4099	0.4059	0.4017	0.3975	0.3931	0.3886	0.3840	0.3792	0.3744	0.3694	0.3644	0.3592
62	0.4271	0.4235	0.4197	0.4158	0.4118	0.4077	0.4034	0.3990	0.3945	0.3898	0.3850	0.3801	0.3750	0.3699	0.3647
63	0.4330	0.4293	0.4256	0.4217	0.4176	0.4135	0.4091	0.4047	0.4001	0.3954	0.3905	0.3856	0.3805	0.3753	0.3699
64	0.4390	0.4353	0.4316	0.4276	0.4236	0.4194	0.4150	0.4105	0.4059	0.4011	0.3962	0.3912	0.3860	0.3807	0.3753
65	0.4453	0.4416	0.4378	0.4339	0.4298	0.4256	0.4212	0.4167	0.4120	0.4072	0.4022	0.3972	0.3919	0.3866	0.3811

Mortality: Participant: PBGC Disabled Male  
 Beneficiary UP84-4

Interest: 6%

NCEW 75% Joint Survivor Reduction Factors (Disabled) with lifetime "Pop-up" feature.  
 75% benefit continuation upon death of Participant. Restoration of benefit to participant upon beneficiary's death.

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
25	0.2326	0.2311	0.2297	0.2286	0.2275	0.2267	0.2261	0.2257	0.2255	0.2256	0.2260	0.2257	0.2255	0.2252	0.2268
26	0.2253	0.2239	0.2226	0.2215	0.2206	0.2199	0.2194	0.2192	0.2191	0.2193	0.2198	0.2198	0.2195	0.2192	0.2187
27	0.2185	0.2171	0.2159	0.2149	0.2140	0.2134	0.2130	0.2129	0.2130	0.2133	0.2139	0.2148	0.2153	0.2159	0.2164
28	0.2124	0.2110	0.2099	0.2089	0.2081	0.2075	0.2072	0.2071	0.2073	0.2078	0.2085	0.2095	0.2107	0.2124	0.2138
29	0.2072	0.2058	0.2046	0.2036	0.2029	0.2023	0.2021	0.2021	0.2023	0.2028	0.2036	0.2047	0.2060	0.2077	0.2100
30	0.2029	0.2015	0.2003	0.1993	0.1986	0.1980	0.1978	0.1978	0.1980	0.1986	0.1994	0.2006	0.2020	0.2037	0.2058
31	0.1997	0.1983	0.1971	0.1960	0.1952	0.1947	0.1944	0.1944	0.1946	0.1952	0.1960	0.1972	0.1986	0.2003	0.2024
32	0.1977	0.1962	0.1949	0.1938	0.1930	0.1923	0.1920	0.1919	0.1922	0.1927	0.1935	0.1946	0.1960	0.1977	0.1998
33	0.1969	0.1952	0.1938	0.1927	0.1917	0.1910	0.1906	0.1904	0.1906	0.1910	0.1918	0.1928	0.1941	0.1958	0.1979
34	0.1971	0.1954	0.1939	0.1926	0.1915	0.1907	0.1902	0.1899	0.1899	0.1903	0.1909	0.1919	0.1931	0.1947	0.1967
35	0.1984	0.1966	0.1950	0.1935	0.1923	0.1914	0.1907	0.1903	0.1902	0.1904	0.1909	0.1917	0.1929	0.1943	0.1962
36	0.2007	0.1987	0.1969	0.1954	0.1940	0.1929	0.1921	0.1916	0.1913	0.1913	0.1917	0.1923	0.1933	0.1946	0.1963
37	0.2037	0.2016	0.1997	0.1980	0.1965	0.1952	0.1942	0.1935	0.1930	0.1929	0.1931	0.1936	0.1943	0.1955	0.1970
38	0.2073	0.2051	0.2030	0.2011	0.1994	0.1980	0.1968	0.1959	0.1953	0.1950	0.1949	0.1952	0.1958	0.1967	0.1981
39	0.2114	0.2090	0.2067	0.2047	0.2028	0.2012	0.1998	0.1987	0.1979	0.1974	0.1971	0.1972	0.1976	0.1983	0.1994
40	0.2158	0.2133	0.2109	0.2086	0.2066	0.2048	0.2032	0.2019	0.2009	0.2002	0.1997	0.1996	0.1997	0.2002	0.2011
41	0.2206	0.2179	0.2153	0.2129	0.2107	0.2087	0.2069	0.2054	0.2042	0.2032	0.2026	0.2022	0.2021	0.2023	0.2030
42	0.2257	0.2228	0.2201	0.2175	0.2151	0.2129	0.2110	0.2092	0.2078	0.2066	0.2057	0.2051	0.2047	0.2047	0.2051
43	0.2310	0.2280	0.2249	0.2223	0.2197	0.2173	0.2152	0.2132	0.2115	0.2101	0.2090	0.2081	0.2075	0.2073	0.2074
44	0.2366	0.2334	0.2303	0.2274	0.2246	0.2220	0.2197	0.2175	0.2156	0.2139	0.2126	0.2114	0.2106	0.2101	0.2100
45	0.2425	0.2391	0.2359	0.2328	0.2298	0.2270	0.2244	0.2221	0.2199	0.2180	0.2164	0.2150	0.2139	0.2131	0.2127
46	0.2487	0.2452	0.2418	0.2385	0.2353	0.2324	0.2296	0.2270	0.2246	0.2225	0.2206	0.2189	0.2176	0.2165	0.2158
47	0.2554	0.2517	0.2481	0.2447	0.2413	0.2381	0.2351	0.2323	0.2297	0.2273	0.2252	0.2233	0.2217	0.2203	0.2193
48	0.2624	0.2586	0.2548	0.2512	0.2477	0.2443	0.2411	0.2381	0.2352	0.2326	0.2302	0.2280	0.2261	0.2245	0.2232
49	0.2696	0.2657	0.2618	0.2580	0.2543	0.2507	0.2473	0.2440	0.2410	0.2381	0.2355	0.2330	0.2309	0.2289	0.2274
50	0.2771	0.2730	0.2690	0.2650	0.2611	0.2574	0.2537	0.2503	0.2470	0.2439	0.2410	0.2383	0.2359	0.2337	0.2318
51	0.2847	0.2804	0.2763	0.2721	0.2681	0.2642	0.2604	0.2567	0.2532	0.2499	0.2467	0.2438	0.2410	0.2386	0.2364
52	0.2923	0.2879	0.2836	0.2793	0.2751	0.2710	0.2670	0.2632	0.2594	0.2559	0.2525	0.2493	0.2464	0.2436	0.2412
53	0.2999	0.2954	0.2909	0.2865	0.2822	0.2779	0.2737	0.2697	0.2658	0.2620	0.2584	0.2550	0.2517	0.2487	0.2460
54	0.3075	0.3029	0.2983	0.2938	0.3014	0.2848	0.2805	0.2762	0.2721	0.2681	0.2643	0.2607	0.2572	0.2539	0.2509
55	0.3150	0.3103	0.3056	0.3009	0.2963	0.2917	0.2872	0.2827	0.2784	0.2743	0.2702	0.2664	0.2627	0.2592	0.2559
56	0.3223	0.3175	0.3127	0.3079	0.3031	0.2984	0.2937	0.2891	0.2847	0.2803	0.2761	0.2720	0.2681	0.2643	0.2608
57	0.3294	0.3245	0.3196	0.3146	0.3097	0.3049	0.3000	0.2953	0.2906	0.2861	0.2817	0.2774	0.2733	0.2693	0.2656
58	0.3361	0.3311	0.3261	0.3210	0.3160	0.3110	0.3060	0.3011	0.2963	0.2916	0.2870	0.2825	0.2782	0.2740	0.2700
59	0.3425	0.3374	0.3323	0.3271	0.3219	0.3168	0.3117	0.3066	0.3016	0.2967	0.2920	0.2873	0.2828	0.2784	0.2742
60	0.3484	0.3432	0.3380	0.3327	0.3274	0.3221	0.3169	0.3117	0.3065	0.3015	0.2965	0.2916	0.2869	0.2824	0.2780
61	0.3540	0.3487	0.3434	0.3380	0.3326	0.3271	0.3217	0.3164	0.3111	0.3059	0.3007	0.2957	0.2908	0.2860	0.2814
62	0.3593	0.3539	0.3485	0.3430	0.3374	0.3319	0.3264	0.3209	0.3154	0.3100	0.3047	0.2995	0.2944	0.2894	0.2846
63	0.3645	0.3590	0.3535	0.3478	0.3422	0.3365	0.3308	0.3251	0.3195	0.3139	0.3084	0.3030	0.2977	0.2925	0.2876
64	0.3698	0.3642	0.3585	0.3528	0.3470	0.3412	0.3353	0.3295	0.3237	0.3179	0.3123	0.3066	0.3011	0.2957	0.2905
65	0.3755	0.3698	0.3640	0.3581	0.3521	0.3462	0.3402	0.3342	0.3282	0.3222	0.3163	0.3105	0.3048	0.2992	0.2937

Mortality: Participant: PBGC Disabled Male  
 Beneficiary UP84-4

Interest: 6%

NCEW 100% Joint Survivor Factors (Disabled) with lifetime "Pop-Up"  
 100% benefit continuation at death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
25	0.3564	0.3546	0.3527	0.3507	0.3487	0.3466	0.3444	0.3422	0.3398	0.3374	0.3350	0.3324	0.3298	0.3271	0.3243
26	0.3487	0.3469	0.3449	0.3429	0.3409	0.3387	0.3365	0.3342	0.3318	0.3294	0.3269	0.3243	0.3216	0.3188	0.3160
27	0.3417	0.3399	0.3379	0.3359	0.3338	0.3316	0.3293	0.3270	0.3245	0.3220	0.3195	0.3168	0.3141	0.3113	0.3084
28	0.3358	0.3339	0.3319	0.3298	0.3277	0.3254	0.3231	0.3207	0.3183	0.3157	0.3131	0.3104	0.3076	0.3047	0.3018
29	0.3311	0.3291	0.3271	0.3250	0.3228	0.3205	0.3182	0.3157	0.3132	0.3106	0.3079	0.3052	0.3023	0.2994	0.2964
30	0.3277	0.3257	0.3236	0.3215	0.3192	0.3169	0.3145	0.3121	0.3095	0.3068	0.3041	0.3013	0.2984	0.2954	0.2923
31	0.3257	0.3237	0.3216	0.3194	0.3171	0.3148	0.3124	0.3098	0.3072	0.3045	0.3017	0.2989	0.2959	0.2929	0.2898
32	0.3252	0.3232	0.3211	0.3188	0.3166	0.3142	0.3117	0.3091	0.3065	0.3037	0.3009	0.2980	0.2950	0.2919	0.2887
33	0.3261	0.3241	0.3219	0.3197	0.3173	0.3149	0.3124	0.3098	0.3071	0.3044	0.3015	0.2985	0.2955	0.2923	0.2891
34	0.3284	0.3263	0.3242	0.3219	0.3196	0.3171	0.3146	0.3120	0.3092	0.3064	0.3035	0.3005	0.2974	0.2942	0.2910
35	0.3320	0.3299	0.3277	0.3254	0.3230	0.3206	0.3180	0.3154	0.3126	0.3098	0.3068	0.3038	0.3007	0.2974	0.2941
36	0.3366	0.3345	0.3323	0.3300	0.3276	0.3251	0.3226	0.3199	0.3171	0.3142	0.3113	0.3082	0.3050	0.3018	0.2984
37	0.3421	0.3400	0.3378	0.3355	0.3331	0.3306	0.3280	0.3253	0.3225	0.3196	0.3166	0.3135	0.3103	0.3070	0.3036
38	0.3482	0.3461	0.3439	0.3416	0.3391	0.3366	0.3340	0.3313	0.3285	0.3256	0.3226	0.3195	0.3163	0.3129	0.3095
39	0.3548	0.3526	0.3504	0.3481	0.3457	0.3432	0.3406	0.3378	0.3350	0.3321	0.3291	0.3259	0.3227	0.3193	0.3159
40	0.3617	0.3596	0.3574	0.3551	0.3526	0.3501	0.3475	0.3448	0.3419	0.3390	0.3360	0.3328	0.3295	0.3262	0.3227
41	0.3690	0.3668	0.3646	0.3623	0.3599	0.3574	0.3547	0.3520	0.3491	0.3462	0.3431	0.3400	0.3367	0.3333	0.3298
42	0.3765	0.3744	0.3721	0.3698	0.3674	0.3649	0.3622	0.3595	0.3567	0.3537	0.3506	0.3474	0.3442	0.3408	0.3372
43	0.3841	0.3820	0.3798	0.3775	0.3751	0.3725	0.3699	0.3672	0.3643	0.3613	0.3583	0.3551	0.3518	0.3484	0.3448
44	0.3920	0.3899	0.3877	0.3854	0.3830	0.3804	0.3778	0.3751	0.3722	0.3692	0.3662	0.3630	0.3596	0.3562	0.3527
45	0.4001	0.3980	0.3958	0.3935	0.3910	0.3885	0.3859	0.3832	0.3803	0.3773	0.3742	0.3710	0.3677	0.3643	0.3607
46	0.4084	0.4063	0.4041	0.4018	0.3994	0.3969	0.3943	0.3915	0.3887	0.3857	0.3826	0.3794	0.3761	0.3727	0.3691
47	0.4171	0.4150	0.4128	0.4105	0.4081	0.4056	0.4030	0.4003	0.3974	0.3945	0.3914	0.3882	0.3849	0.3814	0.3779
48	0.4260	0.4239	0.4218	0.4195	0.4171	0.4146	0.4120	0.4093	0.4065	0.4035	0.4004	0.3972	0.3939	0.3905	0.3869
49	0.4350	0.4330	0.4308	0.4286	0.4262	0.4237	0.4211	0.4184	0.4156	0.4126	0.4096	0.4064	0.4031	0.3996	0.3961
50	0.4441	0.4421	0.4399	0.4377	0.4353	0.4329	0.4303	0.4276	0.4248	0.4219	0.4188	0.4156	0.4123	0.4089	0.4053
51	0.4532	0.4512	0.4491	0.4468	0.4445	0.4420	0.4395	0.4368	0.4340	0.4311	0.4281	0.4249	0.4216	0.4182	0.4146
52	0.4622	0.4602	0.4581	0.4559	0.4535	0.4511	0.4486	0.4459	0.4431	0.4402	0.4372	0.4341	0.4308	0.4274	0.4238
53	0.4710	0.4690	0.4669	0.4648	0.4625	0.4601	0.3922	0.4549	0.4521	0.4492	0.4462	0.4431	0.4399	0.4364	0.4329
54	0.4797	0.4778	0.4757	0.4735	0.4713	0.4689	0.4664	0.4638	0.4610	0.4582	0.4552	0.4520	0.4488	0.4454	0.4419
55	0.4883	0.4863	0.4843	0.4821	0.4799	0.4775	0.4750	0.4724	0.4697	0.4668	0.4639	0.4608	0.4575	0.4542	0.4507
56	0.4965	0.4946	0.4926	0.4904	0.4882	0.4859	0.4834	0.4808	0.4781	0.4753	0.4723	0.4692	0.4660	0.4627	0.4592
57	N/A	N/A	N/A	0.4984	0.4962	0.4939	0.4914	0.4888	0.4862	0.4833	0.4804	0.4773	0.4741	0.4708	0.4673
58	N/A	N/A	N/A	N/A	N/A	N/A	0.4990	0.4965	0.4938	0.4910	0.4881	0.4850	0.4818	0.4785	0.4751
59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.4982	0.4953	0.4923	0.4891	0.4858
60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.4991	0.4959	0.4926	0.4892
61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.4991	0.4957
62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
64	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

\*N/A: Reduction over 50% not allowed under IRS rules.

NCEW 100% Joint Survivor Factors (Disabled) with lifetime "Pop-Up"  
 100% benefit continuation at death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
25	0.3214	0.3185	0.3155	0.3124	0.3093	0.3060	0.3027	0.2994	0.2959	0.2924	0.2888	0.2852	0.2815	0.2777	0.2738
26	0.3131	0.3101	0.3070	0.3039	0.3007	0.2974	0.2941	0.2906	0.2872	0.2836	0.2800	0.2763	0.2725	0.2687	0.2648
27	0.3054	0.3024	0.2992	0.2961	0.2928	0.2894	0.2860	0.2826	0.2790	0.2754	0.2717	0.2680	0.2642	0.2603	0.2564
28	0.2987	0.2957	0.2925	0.2892	0.2859	0.2825	0.2790	0.2755	0.2719	0.2682	0.2644	0.2606	0.2568	0.2528	0.2488
29	0.2933	0.2901	0.2869	0.2836	0.2802	0.2767	0.2731	0.2695	0.2659	0.2621	0.2583	0.2544	0.2505	0.2465	0.2424
30	0.2892	0.2860	0.2827	0.2793	0.2758	0.2723	0.2686	0.2650	0.2612	0.2574	0.2535	0.2495	0.2455	0.2414	0.2373
31	0.2866	0.2833	0.2799	0.2764	0.2729	0.2693	0.2656	0.2618	0.2580	0.2541	0.2501	0.2461	0.2416	0.2378	0.2336
32	0.2855	0.2821	0.2787	0.2752	0.2715	0.2679	0.2641	0.2603	0.2563	0.2524	0.2483	0.2442	0.2400	0.2357	0.2314
33	0.2858	0.2824	0.2789	0.2753	0.2716	0.2679	0.2640	0.2601	0.2561	0.2521	0.2479	0.2437	0.2394	0.2351	0.2307
34	0.2876	0.2841	0.2806	0.2769	0.2732	0.2694	0.2655	0.2615	0.2574	0.2533	0.2491	0.2448	0.2404	0.2360	0.2315
35	0.2907	0.2872	0.2836	0.2799	0.2761	0.2722	0.2682	0.2642	0.2601	0.2558	0.2515	0.2472	0.2427	0.2382	0.2336
36	0.2950	0.2914	0.2877	0.2840	0.2801	0.2762	0.2722	0.2681	0.2639	0.2596	0.2552	0.2507	0.2462	0.2416	0.2369
37	0.3001	0.2966	0.2928	0.2890	0.2852	0.2812	0.2771	0.2729	0.2686	0.2643	0.2598	0.2553	0.2507	0.2460	0.2413
38	0.3060	0.3023	0.2986	0.2948	0.2908	0.2868	0.2826	0.2784	0.2741	0.2697	0.2651	0.2605	0.2559	0.2511	0.2463
39	0.3123	0.3086	0.3049	0.3010	0.2970	0.2929	0.2887	0.2844	0.2801	0.2756	0.2710	0.2663	0.2616	0.2567	0.2518
40	0.3191	0.3154	0.3116	0.3077	0.3036	0.2995	0.2953	0.2909	0.2865	0.2820	0.2773	0.2726	0.2677	0.2628	0.2578
41	0.3262	0.3225	0.3186	0.3147	0.3106	0.3064	0.3021	0.2978	0.2933	0.2887	0.2840	0.2792	0.2743	0.2693	0.2642
42	0.3336	0.3298	0.3260	0.3220	0.3179	0.3137	0.3094	0.3049	0.3004	0.2957	0.2910	0.2861	0.2812	0.2761	0.2709
43	0.3412	0.3374	0.3335	0.3295	0.3254	0.3211	0.3168	0.3123	0.3077	0.3030	0.2982	0.2933	0.2882	0.2831	0.2779
44	0.3490	0.3452	0.3413	0.3372	0.3331	0.3288	0.3244	0.3199	0.3153	0.3105	0.3057	0.3007	0.2956	0.2904	0.2851
45	0.3577	0.3532	0.3493	0.3452	0.3411	0.3368	0.3323	0.3278	0.3231	0.3183	0.3134	0.3084	0.3033	0.2980	0.2926
46	0.3654	0.3616	0.3576	0.3536	0.3494	0.3450	0.3406	0.3360	0.3313	0.3265	0.3215	0.3165	0.3113	0.3060	0.3005
47	0.3742	0.3703	0.3664	0.3623	0.3581	0.3537	0.3492	0.3446	0.3399	0.3351	0.3301	0.3250	0.3197	0.3144	0.3089
48	0.3832	0.3794	0.3754	0.3713	0.3671	0.3627	0.3582	0.3536	0.3489	0.3440	0.3390	0.3338	0.3285	0.3231	0.3176
49	0.3924	0.3885	0.3846	0.3805	0.3762	0.3719	0.3674	0.3627	0.3580	0.3531	0.3480	0.3428	0.3375	0.3321	0.3265
50	0.4016	0.3978	0.3939	0.3897	0.3855	0.3811	0.3766	0.3720	0.3672	0.3623	0.3572	0.3520	0.3467	0.3412	0.3356
51	0.4109	0.4071	0.4032	0.3991	0.3948	0.3904	0.3859	0.3813	0.3765	0.3708	0.3665	0.3613	0.3559	0.3504	0.3448
52	0.4202	0.4163	0.4124	0.4083	0.4041	0.3997	0.3952	0.3905	0.3857	0.3808	0.3757	0.3704	0.3651	0.3595	0.3539
53	0.4292	0.4254	0.4215	0.4174	0.4132	0.4088	0.4043	0.3996	0.3948	0.3899	0.3848	0.3795	0.3741	0.3686	0.3629
54	0.4382	0.4344	0.4305	0.4264	0.4222	0.4178	0.4133	0.4087	0.4038	0.3989	0.3938	0.3885	0.3831	0.3775	0.3718
55	0.4470	0.4432	0.4393	0.4352	0.4310	0.4267	0.4221	0.4175	0.4127	0.4077	0.4026	0.3973	0.3919	0.3863	0.3806
56	0.4556	0.4518	0.4479	0.4438	0.4396	0.4352	0.4307	0.4261	0.4213	0.4163	0.4112	0.4059	0.4005	0.3949	0.3891
57	0.4637	0.4600	0.4561	0.4520	0.4610	0.4434	0.4389	0.4343	0.4295	0.4245	0.4194	0.4141	0.4086	0.4030	0.3973
58	0.4715	0.4677	0.4638	0.4598	0.4556	0.4512	0.4467	0.4420	0.4372	0.4323	0.4271	0.4218	0.4164	0.4107	0.4050
59	0.4788	0.4751	0.4712	0.4671	0.4629	0.4586	0.4541	0.4494	0.4446	0.4396	0.4345	0.4291	0.4237	0.4180	0.4122
60	0.4856	0.4819	0.4780	0.4740	0.4698	0.4654	0.4609	0.4562	0.4514	0.4464	0.4412	0.4359	0.4304	0.4248	0.4189
61	0.4921	0.4884	0.4845	0.4805	0.4763	0.4719	0.4674	0.4627	0.4579	0.4529	0.4477	0.4423	0.4368	0.4311	0.4483
62	0.4983	0.4946	0.4907	0.4867	0.4825	0.4781	0.4736	0.4689	0.4641	0.4590	0.4538	0.4485	0.4429	0.4372	0.4313
63	N/A	N/A	0.4968	0.4927	0.4885	0.4841	0.4796	0.4749	0.4701	0.4650	0.4598	0.4544	0.4488	0.4430	0.4371
64	N/A	N/A	N/A	0.4988	0.4946	0.4903	0.4857	0.4810	0.4761	0.4711	0.4658	0.4604	0.4548	0.4490	0.4430
65	N/A	N/A	N/A	N/A	N/A	0.4967	0.4922	0.4874	0.4825	0.4775	0.4722	0.4667	0.4611	0.4553	0.4493

Mortality: Participant PBGC SS Disabled Males  
 Beneficiary UP84-4  
 Interest Rate: 6%

NCEW 100% Joint Survivor Factors (Disabled) with lifetime "Pop-Up"  
 100% benefit continuation at death of participant. Restoration of benefit to participant at beneficiary's death.

Participant Age	Spouse Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
25	0.2699	0.2659	0.2619	0.2578	0.2536	0.2494	0.2451	0.2408	0.2364	0.2319	0.2276	0.2222	0.2164	0.2102	0.2057
26	0.2609	0.2569	0.2528	0.2487	0.2445	0.2403	0.2360	0.2317	0.2273	0.2229	0.2185	0.2131	0.2071	0.2005	0.1933
27	0.2524	0.2483	0.2442	0.2401	0.2359	0.2316	0.2273	0.2230	0.2186	0.2142	0.2098	0.2053	0.2001	0.1945	0.1884
28	0.2448	0.2407	0.2365	0.2323	0.2281	0.2238	0.2195	0.2151	0.2107	0.2063	0.2019	0.1974	0.1929	0.1885	0.1834
29	0.2383	0.2341	0.2299	0.2257	0.2214	0.2170	0.2127	0.2083	0.2038	0.1994	0.1949	0.1904	0.1859	0.1814	0.1772
30	0.2331	0.2289	0.2246	0.2203	0.2159	0.2115	0.2071	0.2026	0.1981	0.1936	0.1891	0.1845	0.1800	0.1754	0.1708
31	0.2293	0.2250	0.2206	0.2162	0.2118	0.2073	0.2028	0.1982	0.1937	0.1891	0.1845	0.1799	0.1753	0.1707	0.1661
32	0.2271	0.2227	0.2182	0.2137	0.2092	0.2046	0.2000	0.1954	0.1907	0.1861	0.1814	0.1767	0.1721	0.1674	0.1627
33	0.2263	0.2217	0.2172	0.2034	0.2080	0.2033	0.1986	0.1939	0.1891	0.1844	0.1796	0.1749	0.1701	0.1653	0.1605
34	0.2269	0.2223	0.2177	0.2130	0.2082	0.2035	0.1987	0.1939	0.1796	0.1842	0.1793	0.1744	0.1696	0.1647	0.1598
35	0.2290	0.2243	0.2195	0.2147	0.2099	0.2050	0.2001	0.1952	0.1902	0.1853	0.1803	0.1753	0.1703	0.1653	0.1603
36	0.2322	0.2274	0.2226	0.2177	0.2127	0.2077	0.2027	0.1977	0.1926	0.1875	0.1824	0.1773	0.1722	0.1671	0.1620
37	0.2364	0.2315	0.2266	0.2216	0.2165	0.2114	0.2063	0.2012	0.1960	0.1908	0.1856	0.1804	0.1751	0.1699	0.1647
38	0.2413	0.2364	0.2313	0.2262	0.2210	0.2158	0.2106	0.2053	0.2000	0.1947	0.1894	0.1841	0.1787	0.1734	0.1680
39	0.2468	0.2417	0.2366	0.2314	0.2261	0.2208	0.2154	0.2101	0.2046	0.1992	0.1937	0.1883	0.1828	0.1773	0.1718
40	0.2527	0.2476	0.2423	0.2370	0.2317	0.2263	0.2208	0.2153	0.2097	0.2042	0.1986	0.1930	0.1874	0.1818	0.1762
41	0.2590	0.2538	0.2484	0.2430	0.2376	0.2321	0.2265	0.2209	0.2152	0.2095	0.2038	0.1981	0.1923	0.1866	0.1808
42	0.2657	0.2604	0.2549	0.2494	0.2439	0.2382	0.2326	0.2268	0.2211	0.2152	0.2094	0.2035	0.1977	0.1917	0.1858
43	0.2726	0.2671	0.2615	0.2560	0.2504	0.2446	0.2389	0.2330	0.2271	0.2212	0.2152	0.2092	0.2032	0.1971	0.1911
44	0.2797	0.2742	0.2686	0.2630	0.2572	0.2514	0.2455	0.2395	0.2335	0.2274	0.2213	0.2152	0.2090	0.2028	0.1966
45	0.2872	0.2816	0.2759	0.2702	0.2643	0.2584	0.2524	0.2463	0.2402	0.2340	0.2278	0.2215	0.2152	0.2088	0.2025
46	0.2950	0.2894	0.2836	0.2778	0.2718	0.2658	0.2597	0.2535	0.2473	0.2410	0.2347	0.2283	0.2218	0.2153	0.2088
47	0.3033	0.2976	0.2918	0.2859	0.2799	0.2737	0.2675	0.2613	0.2549	0.2485	0.2421	0.2355	0.2290	0.2223	0.2157
48	0.3120	0.2177	0.3003	0.2943	0.2883	0.2821	0.2758	0.2694	0.2630	0.2565	0.2499	0.2433	0.2366	0.2298	0.2230
49	0.3208	0.3150	0.3091	0.3031	0.2969	0.2906	0.2843	0.2778	0.2713	0.2647	0.2580	0.2513	0.2445	0.2376	0.2306
50	0.3299	0.3240	0.3180	0.3119	0.3057	0.2994	0.2930	0.2865	0.2799	0.2732	0.2664	0.2595	0.2526	0.2456	0.2385
51	0.3390	0.3331	0.3271	0.3209	0.3147	0.3083	0.3018	0.2952	0.2885	0.2817	0.2749	0.2679	0.2609	0.2538	0.2466
52	0.3481	0.3421	0.3361	0.3299	0.3236	0.3171	0.3106	0.3039	0.2972	0.2903	0.2834	0.2764	0.2693	0.2620	0.2548
53	0.3571	0.3493	0.3450	0.3388	0.3324	0.3259	0.3193	0.3126	0.3058	0.2989	0.2919	0.2848	0.2776	0.2703	0.2629
54	0.3660	0.3600	0.3539	0.3476	0.3549	0.3347	0.3280	0.3213	0.3144	0.3074	0.3004	0.2932	0.2859	0.2785	0.2711
55	0.3747	0.3687	0.3626	0.3563	0.3498	0.3433	0.3366	0.3298	0.3228	0.3158	0.3087	0.3015	0.2941	0.2867	0.2791
56	0.3832	0.3772	0.3710	0.3647	0.3582	0.3516	0.3449	0.3380	0.3311	0.3240	0.3168	0.3095	0.3021	0.2946	0.2870
57	0.3914	0.3853	0.3791	0.3727	0.3662	0.3596	0.3528	0.3459	0.3389	0.3318	0.3245	0.3172	0.3097	0.3021	0.2944
58	0.3990	0.3929	0.3867	0.3803	0.3737	0.3671	0.3603	0.3533	0.3463	0.3391	0.3318	0.3244	0.3169	0.3092	0.3014
59	0.4063	0.4001	0.3939	0.3874	0.3809	0.3741	0.3673	0.3603	0.3532	0.3459	0.3386	0.3311	0.3235	0.3158	0.3080
60	0.4129	0.4068	0.4005	0.3940	0.3874	0.3806	0.3737	0.3666	0.3595	0.3521	0.3447	0.3372	0.3295	0.3218	0.3139
61	0.4192	0.4130	0.4067	0.4001	0.3935	0.3866	0.3797	0.3726	0.3653	0.3579	0.3505	0.3428	0.3351	0.3273	0.3193
62	0.4252	0.4190	0.4126	0.4060	0.3992	0.3923	0.3853	0.3781	0.3708	0.3634	0.3558	0.3481	0.3403	0.3323	0.3242
63	0.4310	0.4247	0.4182	0.4116	0.4048	0.3978	0.3907	0.3834	0.3760	0.3685	0.3608	0.3530	0.3451	0.3370	0.3289
64	0.4369	0.4305	0.4240	0.4173	0.4104	0.4034	0.3962	0.3888	0.3813	0.3737	0.3659	0.3580	0.3500	0.3418	0.3335
65	0.4430	0.4366	0.4301	0.4233	0.4163	0.4092	0.4020	0.3945	0.3869	0.3792	0.3713	0.3633	0.3552	0.3469	0.3384

Mortality: Participant PBGC SS Disabled Males  
 Beneficiary UP84-4  
 Interest Rate: 6%

**APPENDIX E**  
**MONTHLY ANNUITY EQUIVALENT TO \$1,000 LUMP SUM DEATH BENEFIT**  
**When Participant Dies Before Age 55**

Participant Age at Death	Spouse Younger Than Participant By Stated Years															
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
35	18.75	19.00	19.25	19.70	19.96	20.23	20.53	20.85	21.20	21.57	21.98	22.42	22.89	23.41	23.97	24.58
36	17.75	18.05	18.27	18.57	18.81	19.07	19.34	19.65	19.97	20.33	20.71	21.12	21.57	22.06	22.58	23.16
37	16.80	17.05	17.29	17.50	17.72	17.97	18.23	18.52	18.82	19.16	19.52	19.90	20.33	20.78	21.28	21.81
38	15.90	16.11	16.29	16.49	16.70	16.93	17.18	17.45	17.74	18.05	18.39	18.76	19.15	19.58	20.04	20.54
39	15.02	15.18	15.35	15.54	15.74	15.96	16.19	16.44	16.71	17.01	17.33	17.67	18.04	18.44	18.88	19.35
40	14.15	14.30	14.47	14.64	14.83	15.04	15.26	15.49	15.75	16.03	16.33	16.65	16.99	17.37	17.78	18.21
41	13.34	13.48	13.63	13.80	13.98	14.17	14.38	14.60	14.84	15.10	15.38	15.68	16.01	16.36	16.74	17.15
42	12.57	12.70	12.85	13.00	13.17	13.35	13.55	13.76	13.98	14.23	14.49	14.77	15.07	15.40	15.76	16.14
43	11.84	11.97	12.11	12.25	12.41	12.58	12.76	12.96	13.17	13.40	13.64	13.91	14.19	14.50	14.83	15.19
44	11.16	11.28	11.41	11.55	11.70	11.85	12.03	12.21	12.41	12.62	12.85	13.10	13.36	13.65	13.95	14.29
45	10.52	10.63	10.75	10.88	11.02	11.17	11.33	11.50	11.69	11.89	12.10	12.33	12.57	12.84	13.13	13.44
46	9.91	10.02	10.13	10.25	10.38	10.52	10.67	10.83	11.01	11.19	11.39	11.60	11.83	12.08	12.35	12.63
47	9.34	9.44	9.55	9.66	9.78	9.91	10.05	10.20	10.36	10.53	10.72	10.92	11.13	11.36	11.61	11.87
48	8.80	8.89	8.99	9.10	9.21	9.34	9.47	9.61	9.75	9.92	10.09	10.27	10.47	10.68	10.91	11.15
49	8.29	8.38	8.47	8.57	8.68	8.79	8.91	9.04	9.18	9.33	9.49	9.66	9.84	10.04	10.25	10.47
50	7.81	7.89	7.98	8.07	8.17	8.28	8.39	8.51	8.64	8.78	8.92	9.08	9.25	9.43	9.62	9.83
51	7.36	7.44	7.52	7.60	7.69	7.79	7.90	8.01	8.13	8.25	8.39	8.54	8.69	8.86	9.03	9.22
52	6.93	7.00	7.08	7.16	7.24	7.33	7.43	7.53	7.64	7.76	7.89	8.02	8.16	8.31	8.47	8.65
53	6.53	6.60	6.66	6.74	6.82	6.90	6.99	7.09	7.19	7.29	7.41	7.53	7.66	7.80	7.94	8.10
54	6.15	6.21	6.27	6.34	6.42	6.49	6.57	6.66	6.75	6.85	6.96	7.07	7.19	7.31	7.44	7.58

BASIS: up - 84 @ 6%



**APPENDIX F**  
**MONTHLY ANNUITY EQUIVALENT TO \$1,000 LUMP SUM DEATH BENEFIT**  
**When Participant Dies Before Age 55**

Participant Age at Death	Spouse <i>Older</i> Than Participant By Stated Years														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
35	25.24	25.96	26.74	27.60	28.54	29.57	30.70	31.94	33.32	34.83	36.52	38.39	40.48	42.81	45.42
36	23.78	24.45	25.19	25.99	26.87	27.83	28.89	30.05	31.33	32.75	34.32	36.07	38.01	40.18	42.61
37	22.39	23.03	23.71	24.47	25.29	26.19	27.17	28.26	29.46	30.78	32.24	33.87	35.67	37.69	39.95
38	21.09	21.68	22.32	23.03	23.79	24.64	25.56	26.57	27.69	28.92	30.28	31.79	33.47	35.34	37.43
39	19.86	20.41	21.01	21.67	22.38	23.17	24.03	24.97	26.01	27.15	28.42	29.82	31.38	33.11	35.04
40	18.69	19.21	19.77	20.38	21.05	21.78	22.58	23.46	24.42	25.49	26.66	27.96	29.40	31.00	32.79
41	17.59	18.08	18.60	19.17	19.79	20.47	21.22	22.03	22.92	23.91	24.99	26.19	27.52	29.00	30.65
42	16.55	17.00	17.49	18.02	18.60	19.23	19.92	20.68	21.50	22.41	23.42	24.52	25.75	27.11	28.63
43	15.57	15.99	16.45	16.94	17.48	18.06	18.70	19.40	20.16	21.00	21.93	22.95	24.07	25.33	26.72
44	14.65	15.04	15.46	15.91	16.41	16.95	17.54	18.18	18.89	19.66	20.51	21.45	22.49	23.63	24.91
45	13.77	14.13	14.52	14.94	15.40	15.90	16.45	17.04	17.69	18.40	19.18	20.04	20.98	22.03	23.19
46	12.94	13.28	13.64	14.03	14.45	14.91	15.41	15.95	16.55	17.20	17.91	18.70	19.56	20.51	21.57
47	12.16	12.47	12.80	13.16	13.55	13.97	14.43	14.92	15.47	16.06	16.72	17.43	18.22	19.08	20.03
48	11.42	11.70	12.01	12.34	12.69	13.08	13.50	13.95	14.45	14.99	15.58	16.23	16.94	17.72	18.58
49	10.72	10.98	11.26	11.56	11.88	12.24	12.62	13.03	13.48	13.98	14.51	15.10	15.73	16.43	17.20
50	10.05	10.29	10.55	10.82	11.12	11.44	11.79	12.16	12.57	13.01	13.50	14.02	14.59	15.21	15.89
51	9.42	9.64	9.87	10.12	10.39	10.68	11.00	11.34	11.71	12.10	12.53	13.00	13.51	14.06	14.65
52	8.83	9.03	9.24	9.46	9.71	9.97	10.25	10.56	10.89	11.24	11.62	12.04	12.48	12.96	13.48
53	8.27	8.45	8.64	8.84	9.06	9.30	9.55	9.82	10.11	10.42	10.76	11.12	11.51	11.93	12.37
54	7.73	7.90	8.07	8.25	8.45	8.66	8.88	9.12	9.38	9.65	9.94	10.26	10.59	10.94	11.33

BASIS: UP - 84 @ 6%

# NCEW Pension Enhancement Purchase Rates

## Monthly Lifetime Pension Per \$1,000 Transferred

Age Nearest Birthday	Cash Refund Basis	Single Life Basis -No Death Benefits
	<small>[For Single Life Annuities]</small>	<small>[For Joint Annuities]</small>
55	\$7.80	\$8.00
56	\$7.89	\$8.11
57	\$8.00	\$8.23
58	\$8.10	\$8.36
59	\$8.22	\$8.50
60	\$8.34	\$8.66
61	\$8.47	\$8.82
62	\$8.61	\$9.00
63	\$8.74	\$9.20
64	\$8.91	\$9.41
65	\$9.08	\$9.64
66	\$9.27	\$9.88
67	\$9.43	\$10.14
68	\$9.63	\$10.42
69	\$9.85	\$10.71
70	\$10.04	\$11.03
71	\$10.28	\$11.36
72	\$10.54	\$11.73
73	\$10.82	\$12.12
74	\$11.11	\$12.55
75	\$11.35	\$13.00
76	\$11.67	\$13.50
77	\$12.02	\$14.03
78	\$12.39	\$14.60
79	\$12.65	\$15.20

For Single Life annuities apply rates for Cash Refund Basis.  
 For Joint Life annuities, use Single Life with no death benefits and then apply applicable Joint Survivor reduction factor in Appendices A through D.