

**NEW YORK STATE DEPARTMENT OF FINANCIAL SERVICES  
FOURTH AMENDMENT TO 11 NYCRR 98  
(INSURANCE REGULATION 147)**

**VALUATION OF LIFE INSURANCE RESERVES**

I, Benjamin M. Lawsky, Superintendent of Financial Services, pursuant to the authority granted by Sections 202 and 302 of the Financial Services Law and Sections 301, 1304, 1308, 4217, 4218, 4240 and 4517 of the Insurance Law, do hereby promulgate the Fourth Amendment to Part 98 of Title 11 of the Official Compilation of Codes, Rules and Regulations of the State of New York (Insurance Regulation 147) as an emergency measure, to take effect upon filing with the Secretary of State, to read as follows:

**(New Matter is Underscored; Matter in Brackets is Deleted)**

**The opening paragraph of Section 98.9(c)(2) is amended to read as follows:**

(2) Subparagraphs (i) through [(viii)](x) of this [subdivision]paragraph describe various examples of policy features that constitute guarantees. These subparagraphs also provide reserve methodologies that must be used for determining reserves for these products. For policy features not specifically described herein, the methodologies used to value such products must be consistent with those described in this Part.

**Section 98.9(c)(2)(viii)(b)(2) is amended to read as follows:**

(2) For policies issued on or after January 1, 2007 and prior to January 1, [2014]2013, for the purposes of applying section 98.7(b)(1) of this Part, an insurer may use a lapse rate of no more than two percent per year for the first five years, followed by no more than one percent per year to the policy anniversary specified in the following table based on issue age, and zero percent per year thereafter. If the period of time from the date of policy issuance to the date of the applicable policy anniversary age in the table is less than five years, then an insurer may use a lapse rate of no more than two percent per year for that period of time, and zero percent per year thereafter.

Issue Age	Policy Anniversary After Which the Lapse Rate is Zero
0 – 50	30 <sup>th</sup> Policy Anniversary
51 – 60	Policy Anniversary Age 80
61 – 70	20 <sup>th</sup> Policy Anniversary
71 – 89	Policy Anniversary Age 90
90 and Over	No Lapse

**Section 98.9(c)(2)(viii)(e) is amended to read as follows:**

(e) Compute the net single premium on the valuation date for the coverage provided by the secondary guarantee for the remainder of the secondary guarantee period, using the applicable valuation table and select factors as prescribed in section 98.4(a) of this Part, or Part 100 of this Title (Insurance Regulation 179), if applicable. For purposes of calculating the net single premium for

policies issued on or after January 1, 2007 and prior to January 1, [2014]2013, a lapse rate subject to the same criteria as the lapse rate used in applying clause (b) of this subparagraph may be used.

**Section 98.9(c)(2)(viii)(h)(2) is amended to read as follows:**

(2) Calculate both net premiums using the maximum allowable valuation interest rate and the minimum mortality standards allowable for calculating basic reserves. However, except for policies issued on or after January 1, 2007 [through]and prior to January 1, [2014]2013, if no future premiums are required to support the guarantee period being valued, there is no reduction for surrender charges. If the resulting amount is less than the sum of the basic and deficiency reserve from clause (b) of this subparagraph, then the basic and deficiency reserve to be used for the purposes of section 98.7(b)(1)(vi)(a) of this Part are those calculated in clause (b) of this subparagraph, and no further calculation is required.

**Section 98.9(c)(2)(viii)(j) is amended to read as follows:**

(j) With respect to any policy issued pursuant to this subparagraph, on or after January 1, 2007 and prior to January 1, [2014]2013, the insurer shall annually submit an actuarial opinion and memorandum on or before March 1, in form and substance satisfactory to the superintendent, which satisfies the requirements of Part 95 of this Title (Insurance Regulation 126). Reserves established in accordance with this subparagraph shall be increased by any additional reserves required by the stand-alone asset adequacy analysis.

**(ALL MATERIAL HEREINAFTER IS NEW)**

**A new section 98.9(c)(2)(ix) is added to read as follows:**

(ix)(a) This subparagraph shall not apply to policies where the minimum gross premiums for the policies are determined by applying the set of charges and credits that produces the lowest premiums, regardless of the imposition of constraints, contingencies, or conditions that would otherwise limit the application of those credits and charges.

(b)(1) This subparagraph shall apply to universal life insurance policies that are issued on or after July 1, 2005 and prior to January 1, 2013; in force on December 31, 2012 and thereafter; guarantee coverage to remain in force as long as the accumulation of premiums paid satisfies the secondary guarantee requirement, including universal life insurance policies with secondary guarantee products, with or without shadow accounts, with multiple sets of interest rates or other credits, or multiple sets of cost of insurance, expense, or other charges that may become applicable to the calculation of the secondary guarantee measures in any one policy year, and:

(i) If on December 31, 2012, and on any subsequent valuation date, the sum of direct and assumed face amount in force of universal life insurance to which this subparagraph would otherwise apply exceeds two percent of the insurer's face amount of individual permanent life insurance in force; or

(ii) If on December 31, 2012, and on any subsequent valuation date, the insurer's face amount of insurance in force subject to this subparagraph exceeds one billion dollars.

(2) Insurers subject to this subparagraph shall follow the standards of the valuation of reserves governed by Part 83 of this Title (Insurance Regulation 172).

**A new section 98.9(c)(2)(x) is added to read as follows:**

(x) This subparagraph applies to universal life insurance policies issued on or after January 1, 2013, where the policies guarantee the coverage to remain in force as long as the accumulation of premiums paid satisfies the secondary guarantee requirement.

(a) An insurer shall derive the minimum gross premiums, to be determined at issue, for the policy. The method to be used in deriving the minimum gross premiums is dependent on the policy design. The policy designs are described in subclauses (1) and (2). Except as indicated for policies in Method I, Policy Design #3, as described in subitem (C) below, the minimum premiums so derived must satisfy the secondary guarantee requirement. The definition of minimum premium as used in section 98.7(b)(2)(ii) of this Part does not apply in determining the minimum gross premiums for policies described in this subparagraph.

(1) Method I - Methodology for determining the minimum gross premium for certain policy designs.

(i) Policy Designs.

(A) Policy Design #1: For a policy containing a secondary guarantee that uses a shadow account with a single set of charges and credits, the minimum gross premium for any policy year is the premium that, when paid into a policy with a zero shadow account value at the beginning of the policy year, produces a zero shadow account value at the end of the policy year, using the guaranteed shadow account charges and credits (e.g., interest credited rate, mortality charges, premium loads and expense charges) specified under the secondary guarantee.

(B) Policy Design #2: For a policy that compares paid accumulated premiums to minimum required accumulated premiums (i.e., a cumulative premium policy), with both accumulations based on a single set of charges and credits specified under the secondary guarantee, the minimum gross premium for any policy year is the premium that, when paid into a policy for which the accumulated premiums equals the minimum required accumulated premiums at the beginning of the policy year, results in the paid accumulated premiums being equal to the minimum required accumulated premiums at the end of the policy year.

(C) Policy Design #3: For a policy where, in any policy year, a shadow account secondary guarantee, a cumulative premium secondary guarantee design, or other secondary guarantee design, provides for multiple sets of charges and/or credits, then the minimum gross premiums shall be determined by applying the set of charges and credits in that policy year that produces the lowest premiums, ignoring the constraint that such minimum premiums

satisfy the secondary guarantee requirement and ignoring any contingencies or conditions that would otherwise limit the application of those charges and credits.

(ii) Notwithstanding item (i) of this subclause, the guaranteed or conditionally guaranteed policy credits for each year shall be limited as to magnitude in accordance with this item for purposes of determining the minimum gross premiums. The limitations must be met at the time of each policy form filing and also when guaranteed credits or charges for each policy form are revised. For this purpose, policy credits based on the interest or accumulation rates in the policy shall not exceed the index plus three percent per annum. The index used to establish the limitation as to magnitude shall be either (A) the monthly average of the composite yield on seasoned corporate bonds as published by Moody's Investors Service, Inc. for the month immediately preceding the date of the actuarial opinion required under clause (j) of this subparagraph; or (B) the monthly average over a period of twelve months, ending on June 30 preceding the date of the actuarial opinion required under clause (j) of this subparagraph, of the composite yield on seasoned corporate bonds, as published by Moody's Investors Service, Inc. The insurer shall elect the averaging period at the time that it files the policy forms and such period shall be consistently used for that policy form thereafter even if guaranteed credits or charges are subsequently revised for that product.

(2) Method II - Methodology for determining the minimum gross premiums for other policy designs.

(i) Unless otherwise provided in this subparagraph, the minimum gross premiums shall be the lowest schedule of premiums that keep the policy in force over the life of the secondary guarantee period and that produce the greatest deficiency reserve at issue. If deficiency reserves produced at issue are all zero, then the smallest absolute value of the difference between quantity A over the basic reserve shall be considered the greatest deficiency reserve. For purposes of this subclause, in deriving the deficiency reserve associated with a particular schedule of gross premiums, the X percent to be applied to the mortality rates is equal to 100 for all durations, issue ages, and risk classes.

(ii) For a policy that uses a shadow account or is a cumulative premium policy, the schedule of premiums that keep the policy in force over the life of the secondary guarantee period and that produce the greatest deficiency reserve at issue shall be determined assuming the following premium paying patterns for premiums actually paid under the policy:

(A) Level premiums for the life of the secondary guarantee but not beyond the duration that premiums may be paid under the policy;

(B) Increasing premiums over the life of the secondary guarantee, including any resulting reserve segments created, but not beyond the duration that premiums may be paid under the policy; and

(C) Any combination of the premium patterns specified in subitems (A) and (B) of this item, including higher initial premiums for funding levels to have access to better charges and credits with combinations of level and increasing premium patterns thereafter.

(iii) For any policy subject to Method II of this clause, the insurer shall also perform a good faith high-level analytical review of the policy design with respect to the premium payment patterns to be expected with respect to that design. The review shall consider whether there are situations whereby the product design is likely to elicit a pattern of premium payments that, if paid, would provide the insured with access to lower charges and/or higher credits than those that would apply assuming the premium paying patterns required to be tested under this subclause and thereby result in the need for a deficiency reserve significantly in excess of that determined using the schedules of minimum gross premiums determined pursuant to the premium payment patterns required to be tested under this subclause. To the extent identified, the insurer shall use such other premium payment patterns it determines are likely to result in the need for a greater deficiency reserve than implied by the premium payment patterns required to be tested under this subclause in determining the schedule of minimum gross premiums and related deficiency reserve. In performing this analytical review, the insurer shall consider payment patterns that keep the policy in force over the lifetime of the secondary guarantee.

(b)(1) For purposes for applying section 98.7(b)(1) of this Part, specified premiums shall be the minimum gross premiums derived in clause (a) of this subparagraph. Consistent with section 98.5 of this Part, an insurer shall calculate the items in clauses (c) through (i) of this subparagraph on a segmented basis, using the segments that section 98.5 of this Part defines for the product.

(2) For purposes of clauses (c) through (i) of this subparagraph:

(i) *Fully fund the guarantee* shall mean fully funding the guarantee to the end of each possible segment; and

(ii) *Remainder of the secondary guarantee period* shall mean the remainder of each possible segment.

(3) The reserve shall be no less than the greatest reserve determined by applying the methodology of this subparagraph to the end of each possible segment. The lapse rate used shall be no more than two percent per year for the first five years, followed by no more than one percent per year to the policy anniversary specified in the following table based on issue age, and zero percent per year thereafter. If the period of time from the date of policy issuance to the date of the applicable policy anniversary age in the table is less than five years, then an insurer may use a lapse rate of no more than two percent per year for that period of time, and zero percent per year thereafter.

Issue Age	Policy Anniversary After Which the Lapse Rate is Zero
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51 – 60	Policy Anniversary Age 80
61 – 70	20 <sup>th</sup> Policy Anniversary
71 – 89	Policy Anniversary Age 90
90 and Over	No Lapse

(c) An insurer shall determine the amount of actual premium payments greater than or less than the minimum gross premiums. For a policy utilizing a shadow account and qualifying under one of the Policy Designs of Method I, the amount will be the amount in the shadow account. For a policy utilizing a shadow account whose minimum gross premium is determined under Method II, the amount will be the amount in the shadow account minus the amount that would be in the shadow account if the minimum gross premiums used to calculate basic and deficiency reserves in clause (b) of this subparagraph were paid. This result may be negative. For a cumulative premium policy whose minimum gross premiums are determined under Method I, the excess will be the amount of cumulative premiums paid over the cumulative premium requirements. For a cumulative premium policy whose minimum gross premiums are determined under Method II, the excess will be the amount of cumulative premiums paid minus the cumulative premium using the minimum gross premium used to calculate basic and deficiency reserves in clause (b) of this subparagraph. This result may be negative. The cumulative premium payments and requirements shall include any interest credited under the secondary guarantee, with interest credited at the rate specified under the secondary guarantee.

(d) An insurer shall complete the calculation of the pre-funding ratio as follows:

(1) As of the valuation date for the policy being valued, for a policy utilizing a shadow account, the insurer shall determine the minimum amount in the shadow account required to fully fund the guarantee as follows:

(i) For a cumulative premium policy, the insurer shall determine the minimum amount of the cumulative premiums required to fully fund the guarantee less the cumulative premium requirements.

(ii) For a policy for which the secondary guarantee cannot be fully funded in advance, the insurer shall solve for the minimum sum of any possible excess funding, either the amount in the shadow account or excess cumulative premium payments depending on the product design, and the present value of future premiums, using the maximum allowable valuation interest rate and the minimum mortality standards allowable for calculating basic reserves that would fully fund the guarantee.

(iii) For a shadow account policy, if the minimum gross premium is determined according to Method II and the amount calculated in clause (c) of this subparagraph is positive, then the amount determined in this clause shall be reduced by any positive shadow account balance based on minimum gross premiums.

(iv) For a cumulative premium policy, if the minimum gross premium is determined according to Method II and the amount calculated in clause (c) of this subparagraph is positive, then the amount determined in this clause shall be reduced by the excess of cumulative premiums, assuming minimum gross premiums are paid, over the cumulative premium requirements.

(v) For a shadow account policy, if the minimum gross premium is determined according to Method II and the amount calculated in clause (c) of this subparagraph is negative, then the amount in the shadow account based on the minimum gross premiums shall be used instead of the amount determined in this clause.

(vi) For a cumulative premium policy, if the minimum gross premiums are determined by Method II and the amount calculated in clause (c) of this subparagraph is negative, then the amount of the excess of cumulative premiums, assuming minimum gross premiums are paid, over the cumulative premium requirements, shall be used instead of the amount determined in this clause.

(2) The amount so determined in subclause (1) of this clause shall then be divided by 0.93.

(3) An insurer shall divide the result obtained from clause (c) of this subparagraph by the number determined in subclause (1) of this clause, with the resulting ratio capped at one and no less than negative one. This ratio is intended to measure the level of pre-funding for a secondary guarantee and is used to establish reserves. Assumptions within the numerator and denominator of the ratio therefore must be consistent in order to appropriately reflect the level of prefunding.

(e) The insurer shall compute the net single premium on the valuation date for the coverage provided by the secondary guarantee for the remainder of the secondary guarantee period by, using the applicable valuation table and select factors prescribed in section 98.4(a) of this Part, or Part 100 of this Title (Insurance Regulation 179), if applicable. For purposes of calculating the net single premium, an insurer may use a lapse rate subject to the same criteria as the lapse rate used in applying clause (b) of this subparagraph.

(f)(1) If the amount calculated in clause (c) of this subparagraph is positive, then the insurer shall determine the net amount of additional premiums by multiplying the ratio from clause (d) of this subparagraph by the difference between the net single premium from clause (e) and the basic and deficiency reserve, if any, computed in clause (b) of this subparagraph.

(2) If the amount calculated in clause (c) of this subparagraph is negative, then the insurer shall determine the net amount of additional premiums by multiplying the ratio from clause (d) of this subparagraph, by the basic reserves, if any, computed in clause (b) of this subparagraph. This result will be negative or zero. The insurer shall subtract the deficiency reserve calculated in clause (b) of this subparagraph from the result and:

(i) If the policy is a shadow account policy:

(A) Add the greater of zero or the deficiency reserve at issue calculated by using the X percent associated with the premium paying pattern used in determining the greatest deficiency reserve in Method II of clause (a) of this subparagraph; and

(B) Multiply by one minus the ratio of the amount in the shadow account divided by the minimum amount in the shadow account that would fully fund the guarantee; or

(ii) If the policy is a cumulative premium policy,

(A) Add the greater of zero or the deficiency reserve at issue calculated by using the X percent associated with the premium paying pattern used in determining the greatest deficiency reserve in Method II of clause (a) of this subparagraph; and

(B) Multiply by one minus the ratio of the amount of cumulative premiums paid, divided by the minimum amount of cumulative premiums required to fully fund the guarantee.

(g) The insurer shall compute the reduced deficiency reserve by multiplying the deficiency reserve, if any, by one minus the ratio from clause (d) of this subparagraph, but not less than zero. The insurer shall use the reduced deficiency reserve for the purposes of section 98.7(b)(1)(vi)(a) of this Part.

(h) The insurer shall determine the reserve used for purposes of section 98.7(b)(1)(vi)(a) of this Part as follows:

(1) Determine the lesser of:

(i) The net amount of additional premiums from clause (f) of this subparagraph plus the basic reserve and the deficiency reserve, if any, computed in clause (b) of this subparagraph; and

(ii) The net single premium from clause (e) of this subparagraph;

(2)(i) Multiply the applicable policy surrender charge (*i.e.*, the account value less the cash surrender value) by the ratio of the net level premium for the secondary guarantee period divided by the net level premium for whole life insurance; and

(ii) Reduce the amount in subclause (1) of this clause by the amount in item (i) of this subclause;

(3) Calculate the net premiums using the maximum allowable valuation interest rate and the minimum mortality standards allowable for calculating basic reserves;

(4) Calculate the reserve floor, as follows:

(i) If the result in clause (c) of this subparagraph is negative, then the reserve floor shall equal the sum of the basic and deficiency reserves from clause (b) and the amount from clause (f) of this subparagraph; and

(ii) If the result in clause (c) of this subparagraph, is not negative, then the reserve floor shall equal the sum of the basic and deficiency reserves from clause (b) of this subparagraph without any adjustment; and



(5) For purposes of section 98.7(b)(1)(vi)(a) of this Part, the insurer shall use the reserve that is the greater of the resulting amount calculated under subclause (2) of this clause and the reserve floor calculated under subclause (3) of this clause.

(i) The insurer shall compute an increased basic reserve by subtracting the reduced deficiency reserve in clause (g) of this subparagraph from the reserve computed in clause (h) of this subparagraph. The insurer shall use the resulting increased basic reserve for the purposes of section 98.7(b)(1)(vi)(a) of this Part.

(j) Actuarial Opinion and Insurer Representation Requirements

If an insurer uses one of the policy design methodologies of Method I, as described in clause (a) of this subparagraph, to determine the minimum gross premiums in clause (a) of this subparagraph, the insurer shall submit to the superintendent at the time of filing or approval of a new policy form, or by April 30, 2013, for current policy forms that will be issued in 2013 or any time thereafter, and at any time when rates or charges are changed, an actuarial opinion signed by the appointed actuary and a representation of the insurer signed by a senior officer of the insurer regarding the applicable policy form or forms that states:

(1) Actuarial Opinion

“I, (name and professional designation), am the appointed actuary for (insurer name). I have examined the actuarial assumptions and actuarial methods used in determining the reserves described herein, and, in my opinion: (1) the product referenced herein meets the definition of Policy Design # (insert design number) described in Method I of section 98.9(c)(2)(x)(a) of 11 NYCRR 98 (Insurance Regulation 147), (2) notwithstanding the language in Policy Design # (insert design number), the guaranteed (including conditionally guaranteed) policy credits in the product available for any year do not exceed the “Index” defined in Method I of section 98.9(c)(2)(x)(a) of 11 NYCRR 98 (Insurance Regulation 147), plus 3% per annum, and (3) the minimum gross premiums determined under Policy Design # (insert design number) are not inconsistent with the minimum premiums, charges and credits that are expected to apply under the policy.”

(Name of actuary, printed or typed)

(Signature of actuary)

(Date signed)

(2) Insurer Representation

“(Insurer name) hereby represents: (1) that the product referenced herein meets the definition of Policy Design # (insert design number) described in Method I of section 98.9(c)(2)(x)(a) of 11 NYCRR 98 (Insurance Regulation 147), (2) notwithstanding the language in Policy Design # (insert design number), the guaranteed (including conditionally guaranteed) policy credits in the product available for any year do not exceed the “Index” defined in Method I of section 98.9(c)(2)(x)(a) of 11 NYCRR 98 (Insurance Regulation 147), plus 3% per annum, and (3) the minimum gross premiums determined under Policy Design # (insert design number) are not

inconsistent with the minimum premiums, charges and credits that are expected to apply under the policy.”

(Name of insurer officer, printed or typed)

(Signature of insurer officer)

(Date signed)

### (3) Policy Design

For policies issued by a domestic insurer or sold in New York by a foreign insurer, and where reserves are developed based on Method II of clause (a) of this subparagraph, the insurer shall submit to the superintendent a report from the insurer’s appointed actuary prior to the insurer issuing policies on that form. The report shall briefly describe the analytical review performed, the insurer’s conclusions following the analytical review, and whether any additional premium payment patterns other than those required by clause (a)(2)(iii) of this subparagraph were tested as a result of the review.



NEW YORK STATE  
DEPARTMENT *of*  
FINANCIAL SERVICES

Andrew M. Cuomo  
Governor

Benjamin M. Lawsky  
Superintendent

I, Benjamin M. Lawsky, Superintendent of Financial Services of the State of New York, do hereby certify that the foregoing is the Fourth Amendment of Part 98 of Title 11 (Insurance Regulation 147), signed by me on May 17, 2013, pursuant to the authority granted by Sections 202 and 302 of the Financial Services Law and Sections 301, 1304, 1308, 4217, 4218, 4240 and 4517 of the Insurance Law, to take effect upon filing with the Secretary of State.

Pursuant to Section 202(6) of the State Administrative Procedure Act, 11 NYCRR 98 (Insurance Regulation 147) is being promulgated as an emergency measure. A statement of the specific reasons for the finding of the need for emergency action is attached. This regulation was previously proposed and promulgated on an emergency basis on February 19, 2013.

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Benjamin M. Lawsky  
Superintendent of Financial Services

Date: May 17, 2013

**Statement of the Reasons for Emergency Measure  
Fourth Amendment to Insurance Regulation 147 (11 NYCRR 98)**

This amendment to Regulation 147 contains changes to the reserve requirements on universal life with secondary guarantee policies. The Department has been concerned about compliance and reserve adequacy issues with respect to product designs involving an imbalance between the guarantees and reserves held. The National Association of Insurance Commissioners (“NAIC”) attempted to address this issue with revisions to Actuarial Guideline 38. To prevent potential substantial reserve increases for in-force business, a bifurcated approach was adopted, which provides for separate reserve methodologies for in-force business and prospective business. The Guideline provides that for universal life with secondary guarantee business written between July 1, 2005 and December 31, 2012, the reserves will be determined using a principles-based approach, as adopted by an NAIC Committee in 2012. For business issued after January 1, 2013, the reserves will be calculated using a formulaic-based approach, until such time that principles-based reserving is enacted through a change in law.

These standards have already been adopted by the NAIC through its Accounting Practices and Procedures Manual. Since New York has a separate regulation addressing this subject matter, the revised standards are not automatically adopted and need to be adopted through an amendment to Regulation 147. This amendment incorporates the NAIC revisions identified in Actuarial Guideline 38, thus resulting in consistency between the NAIC’s and New York’s rules and promoting regulatory uniformity across the U.S. Companies domiciled in states that do not adopt these changes by December 31, 2012 will be holding reserves at a different level relative to companies domiciled in states that have adopted these changes.

For insurers that have not followed the intent of the current regulation, adoption of this amendment may increase reserves on business issued between July 1, 2005 and December 31, 2012 of New York authorized life insurers. For insurers that have followed the intent of the current regulation, reserves may decrease.

Insurers subject to this regulation must file quarterly financial statements based upon minimum reserve standards in effect on the date of filing. The filing date for the next quarterly statement is June 1, 2013. The insurers must be given advance notice of the applicable standards in order to file their reports in an accurate and timely manner. It is essential that this regulation be adopted on an emergency basis until such time as it can be adopted on a permanent basis.

For all of the reasons stated above, an emergency adoption of this fourth amendment to Regulation 147 is necessary for the general welfare.



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Benjamin M. Lawsky  
Superintendent of Financial Services

Date: May 17, 2012