

**Securities Industry Association**

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July 15, 1998

Michael A. Macchiaroli
Associate Director
Securities and Exchange Commission
450 Fifth Street, NW
Washington, DC 20549

Dear Mr. Macchiaroli:

The purpose of this letter is to offer a recommendation with respect to the process by which an entity could apply to the Securities and Exchange Commission ("the Commission" or the "SEC") to become an OTC derivatives dealer, as that term is defined in proposed Rule 3b-12. This letter reflects the efforts of a working group drawn from the Risk Management, OTC Derivative Products and Capital Committees of the Securities Industry Association ("SIA"). Additionally, the working group offer suggestions for the modification of proposed Rule 15c3-4.

In brief, we recommend that the application process include the submission of formal documentation consisting of (i) a comprehensive review of the degree to which the applicant is prepared to comply with proposed Rule 15c3-4 and (ii) a comprehensive review of the applicant's controls over models used for pricing OTC derivative products and models used for computing value at risk ("VaR"). To facilitate the review of an application, an applicant would be required to provide an executive summary of information provided to the Commission, and the review of an applicant's compliance with proposed Rule 15c3-4 would include an overview of the applicant's risk management policies and procedures. In preparing this document, the working group members, all of us representing firms participating in the Derivatives Policy Group ("DPG"), indicated that their firms would respond to (i) and (ii) above in the context of the organization structure, policies and procedures established to conform to the requirements of the Framework for Voluntary Oversight.

The working group believes that proposed Rule 15c3-4, in its current form, addresses the management of market risk sufficiently. We do recommend amending proposed Rule 15c3-4 to include specific reference to the management of credit, liquidity, legal, and operational risks and to the role and responsibilities of the internal audit function.

The working group views the application process as laying the groundwork for relationships with the Commission that will differ in some significant ways from what we have experienced in

the past. We believe that implementation of an appropriate regulatory framework for this new category of registrant will of necessity require a closer degree of interaction between the registrant and the Commission's staff. We look forward to working with you to bring that framework to fruition.

COMPLIANCE with PROPOSED RULE 15c3-4

Proposed Rule 15c3-4(a) requires an OTC derivatives dealer to establish and document a "system of internal risk management controls"; Rule 15c3-4(b) sets forth the factors to be considered in establishing the system required under paragraph (a); Rule 15c3-4(c) sets forth the specific minimum requirements for an OTC derivative dealer's internal risk management control system; and Rule 15c3-4(d) sets forth management's responsibilities with respect to an OTC derivatives dealer's internal risk management control system. The working group recommends that an applicant be required to:

- (1) Provide an overview of the applicant's "system of risk management controls" (for a DPG participant, the overview might take the form of the applicant's authorizing guidelines) in response to Rule 15c3-4(a);
- (2) Document how and why the applicant's "system of risk management controls" takes into account the factors enumerated in sub paragraphs 1 through 8 of Rule 15c3-4(b);
- (3) Document how and why the applicant's "system of risk management controls" is responsive to the requirements of sub paragraphs 1 through 3 of Rule 15c3-4(c); provide the definitions specified within Rule 15c3-4(c)(4) and the written guidelines required under Rule 15c3-4(c)(5)(i through xii);
- (4) Document the policies and procedures under which management meets the requirements specified within Rule 15c3-4(d)(1 through 10), for each requirement indicating the organizational units responsible for assuring compliance.

The working group recommends that the responses above cover credit and liquidity risks, as well as market risk. An advantage of the proposed rule structure for an OTC derivatives dealer is exemption from margin regulations; accordingly, the working group recommends that the Commission require the applicant to describe the policies and procedures to be used to evaluate credit exposure and to establish margin policies. Likewise, the working group recommends that the Commission require the applicant to describe the sources of funding available to the OTC derivatives dealer or its parent company (or an affiliate) and document the policies and procedures under which the applicant will assure the continued adequacy of the funding. We intend for our recommendation with respect to the description of funding sources, policies and procedures to serve as a substitute for paragraph (c)(3)(ii) within proposed Appendix F to Rule 15c3-1.

Over the past five years or so, many industry groups (e.g., the Group of Thirty and the DPG) and regulatory bodies have published standards for risk management practices. The working group believes that virtually all of these standards are consistent with each other; the requirements of proposed Rule 15c3-4 are also consistent with these standards. The working group recommends that the Commission require an applicant to discuss its own development of and experience with its risk management policies and practices.

An underpinning of all of the above is the capability to review that specified practices, policies and procedures are being followed and remain effective in the context of their intended purposes. The working group recommends that the Commission require an applicant to provide a plan covering an OTC derivatives dealer's "system of risk management controls" to be executed by the applicant's internal audit group over the coming twelve months.

CONTROL OVER MODELS

The working group recommends that the Commission require an applicant to provide descriptions of the statistical models used (i) to compute VaR and (ii) to price individual derivative products, and descriptions of the controls over those models.

Models to Compute VaR

The description of a model to compute VaR should include:

- (1) The method of simulation;
- (2) The method for estimating "fat tail" results;
- (3) The time period(s) covered by the relevant databases;
- (4) The method(s) by which the model weights data;
- (5) Known limitations in the application of the model (e.g., with respect to the quality of data bases or with respect to adequacy of approximations relied upon);
- (6) As an addendum to all of the above, user documentation for the model.

The working group assumes that models for computing VaR would be under the control of the applicant's risk management unit, which would stand independent of business units; the working group recommends that the Commission ask the applicant for a statement to that effect. Moreover, the working group recommends that the applicant be asked to confirm that the model(s) to be relied upon for computing the applicant's capital requirements is (are) the same model(s) relied upon for the day-to-day management of market risk. An applicant should indicate who, if not the applicant, developed the model(s) for computing VaR; the applicant should also provide the Commission with the names, academic credentials, and work histories of those responsible for validating the model(s) for computing VaR and monitoring the output therefrom.

Backtesting is a critical component of the Commission's proposed rule amendments. The working group recommends that the Commission require an applicant to provide a discussion of the applicant's history of backtesting (and evidence thereof). The working group also recommends that the Commission require an applicant provide at least thirty days of backtesting results for the product lines expected to be transferred to or conducted by the OTC derivatives dealer prior to the commencement of its operations.

Models to Price Derivative Products

Proper documentation of derivatives pricing models is necessary for both risk managers and internal and external auditors to provide assurance with respect to both risks being assumed

and profit and loss computations. The working group has identified what could be described as four requirements for the proper documentation of a model:

- (1) Written description of the method(s) for valuing the derivative instrument, including any assumptions made regarding the behavior of underlying instruments or indices;
- (2) Specification of the financial theory upon which the model is based (e.g., the Black-Scholes model);
- (3) Comments on any known limitations as to the applicability of the model; and
- (4) Written description of the process for the identification of any parameters for pricing the derivative instrument which are not readily observable in the market place.

The working group would expect that such documentation would be available for review during any audit or examination of an OTC derivatives dealer. The working group recommends that the Commission require an applicant to submit documentation for at least several derivative pricing models as part of the application process.

The controls over derivatives pricing models differ from the controls over VaR models in the sense that traders play a critical role in the development of derivatives pricing models and may have the authority to amend those models. The working group recommends that proper controls over derivative pricing models would include:

- (1) Policies and procedures for the identification of any changes to a derivative pricing model;
- (2) Procedures for the independent review of the appropriateness of model changes;
- (3) Policies and procedures for independent price verification or benchmarking; and
- (4) Reviews by internal auditors to assure (1) through (3) are being performed adequately.

The working group recommends that the Commission require an applicant to provide documentation with respect to (1) through (3) prior to the commencement of operations.

We hope the above is helpful in the Commission's efforts to establish a process for reviewing the appropriateness of OTC derivatives dealer applicants. The working group appreciated the opportunity to meet with you and your associates within the Division of Market Regulation to discuss the above material on June 30. The meeting was productive and helpful. As you requested, the SIA Risk Management Committee is continuing its earlier efforts to develop bases for the comparison of broker/dealers' models for computing VaR. We will keep you informed of the group's efforts.

Should you have questions or comments, please contact Jerry Quinn (our SIA staff advisor) at (212) 618-0507 or the undersigned at (212) 902-1360.

Very truly yours,

Mark W. Holloway,

on behalf of the working group