**UNITED STATES OF AMERICA**
**Before the**
**SECURITIES AND EXCHANGE COMMISSION**

**SECURITIES EXCHANGE ACT OF 1934**
**Release No. 83965 / August 28, 2018**

**ADMINISTRATIVE PROCEEDING**
**File No. 3-18688**

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| **In the Matter of**<br><br>**MOODY'S INVESTORS SERVICE, INC.**<br><br>**Respondent.** | **ORDER INSTITUTING CEASE-AND-DESIST PROCEEDINGS PURSUANT TO SECTION 21C OF THE SECURITIES EXCHANGE ACT OF 1934, MAKING FINDINGS, AND IMPOSING A CEASE-AND-DESIST ORDER** |

## I.

The Securities and Exchange Commission ("Commission") deems it appropriate that cease-and-desist proceedings be, and hereby are, instituted pursuant to Section 21C of the Securities Exchange Act of 1934 ("Exchange Act") against Moody's Investors Service, Inc. ("MIS" or "Respondent").

## II.

In anticipation of the institution of these proceedings, MIS has submitted an Offer of Settlement (the "Offer") which the Commission has determined to accept. Solely for the purpose of these proceedings and any other proceedings brought by or on behalf of the Commission, or to which the Commission is a party, and without admitting or denying the findings herein, except as to the Commission's jurisdiction over it and the subject matter of these proceedings, which are admitted, MIS consents to the entry of this Order Instituting Cease-And-Desist Proceedings Pursuant to Section 21C of the Exchange Act of 1934, Making Findings, and Imposing a Cease-and- Desist Order ("Order"), as set forth below.

## III.

On the basis of this Order and Respondent's Offer, the Commission finds[1] that:

### Summary

1. MIS is a nationally recognized statistical rating organization ("NRSRO") that provides credit ratings on securities, including U.S. Residential Mortgage Backed Securities ("RMBS"). From 2010 to 2013, MIS failed to establish, maintain, enforce, and document an effective internal control structure with regard to its use of certain models in its methodology for rating RMBS.

2. In 2010, MIS revised its methodology for rating RMBS by, among other things, incorporating cashflow waterfall models that had been developed by its corporate affiliate, Moody's Analytics ("MA").[2] Later that year, MIS established Outsourcing Policies and Procedures that prescribed oversight responsibilities over outsource providers. Although MA qualified as an outsource provider under the Outsourcing Policies and Procedures, from 2010 to 2013, MIS failed to apply those policies to MA with respect to the waterfall models. MIS had been cautioned by the Commission in 2010 regarding its obligation pursuant to Section 15E(c)(3)(A) of the Exchange Act to establish and follow effective internal controls regarding the procedures and methodologies that MIS used to determine credit ratings. *See* Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: Moody's Investors Service, Inc., Exchange Act Rel. No. 62802 (Aug. 31, 2010) ("21(a) Report").

3. Apart from failing to apply its existing policies and procedures to the outsourcing relationship with MA, MIS failed to establish and document any reasonably designed internal controls over the waterfall models, including, in particular, over the accuracy of the coding of the models. Instead, MIS largely relied upon MA and informal reviews of the output of the models by ratings analysts who were not qualified to conduct adequate quality control of the highly complex models.

4. As a result of these internal controls deficiencies, MIS failed to conduct, or take reasonable steps to ensure that MA conducted, adequate quality assurance processes with regard to the models, which, in turn, led to MIS's failure to timely detect and prevent numerous errors in the models that MIS used in the credit rating process for RMBS beginning in 2010. From 2010 to 2013, MIS used the cashflow waterfall models, during which time MIS personnel discovered that the waterfall models for numerous RMBS transactions contained defects. In early 2013, MIS identified significant coding errors in a group of models that, ultimately, caused

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[1] The findings herein are made pursuant to Respondent's Offer of Settlement and are not binding on any other person or entity in this or any other proceeding.

[2] As described below, MA had developed a Structured Finance Workstation that modelled cashflow waterfalls for RMBS. The terms of each RMBS deal that had been or was being rated by MIS were coded into a script that was used with the SFW to model the cashflow waterfall on a deal-by-deal basis (hereinafter, "cashflow waterfall models"). These scripts were maintained by MA in a so-called "deal library" and were used by MIS in its annual surveillance of the performance and credit risk of the RMBS deals.

MIS to undertake corrective re-ratings of hundreds of RMBS. Also in 2013, two separate reviews, one conducted by an outside consultant and another by Moody's Internal Audit unit, identified various problems with the accuracy and reliability of the waterfall models. It was not until late 2013, however, that MIS began taking steps to establish an effective and consistently-applied system of internal controls concerning the MA waterfall models.

5. In addition to its internal control failures, in fifty-four instances, MIS failed to document its rationale for issuing final RMBS ratings that deviated materially from the respective model-implied ratings with respect to each current credit rating, in violation of Exchange Act Section 17(a)(1) and Rule 17g-2(a)(2).

## Respondent

6. Moody's Investors Service, Inc. is a wholly-owned subsidiary of Moody's Corporation and is registered with the Commission as an NRSRO. As an NRSRO, MIS is required to comply with Section 15E of the Exchange Act and Exchange Act Rules 17g-1 through 17g-10. In 2010, the Commission issued the 21(a) Report, which expressly put MIS on notice of its internal controls obligations under Section 15E(c)(3)(A) of the Exchange Act and reiterated that NRSROs must implement and enforce appropriate internal controls over policies, procedures, and methodologies used to determine credit ratings.

## Other Relevant Entities

7. Moody's Corporation ("MCO") is a Delaware corporation, with its headquarters in New York City. MCO's securities are registered under Section 12(b) of the Exchange Act and its common stock is quoted on the New York Stock Exchange under the symbol "MCO."

8. Moody's Analytics is a wholly-owned subsidiary of MCO. During the relevant period, MA provided economic research, as well as data and analytical tools, such as cashflow waterfall models, to MIS for use in the ratings process. MA also sells products and services to unaffiliated customers.

## Facts

### Background

9. RMBS are securities backed by pools of residential mortgages or loans. The asset pools underlying RMBS typically are comprised of thousands of loans, and investors may lack the resources and expertise necessary to assess the credit quality and other characteristics of the asset pools. As a result, the market for RMBS has evolved into a market in which the credit risk of the RMBS is assessed by, among others, NRSROs and the valuations of RMBS depend significantly on credit ratings. Certain investors in RMBS may use credit ratings to inform their investment decisions.

10. MIS is a registered NRSRO and one of a few credit rating agencies that publishes credit ratings on a wide range of debt instruments and securities, including structured finance

products such as RMBS. Up until the 2007 financial crisis, MIS played a significant role in rating RMBS[3] and after it published its initial ratings, monitored those ratings at least annually.

11. In July 2010, Congress amended Section 15E(c) of the Exchange Act, as part of the Dodd-Frank Wall Street Reform and Consumer Protection Act, to require NRSROs "to establish, maintain, enforce, and document an effective internal control structure governing the implementation of and adherence to policies, procedures, and methodologies for determining credit ratings." *See* Public Law 111-203, 932(a)(2)(B); Exchange Act Section 15E(c)(3)(A). This requirement was self-executing and became effective on July 21, 2010. In enacting this and other provisions concerning credit rating agencies, Congress found that credit rating agencies, including NRSROs, play a critical "gatekeeper" role in the debt market. *See* Public Law 111-203, 931(2)-(3).

12. On August 31, 2010, the Commission issued a Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: Moody's Investors Service, Inc., Exchange Act Rel. No. 62802 (Aug. 31, 2010).[4] In the 21(a) Report, the Commission emphasized MIS and other NRSROs' obligations under Exchange Act Section 15E(c)(3)(A) to implement and follow appropriate internal controls and procedures governing their determination of credit ratings.

**MIS's Approach to Rating RMBS**

13. Beginning prior to the 2007 financial crisis and continuing until 2010, structured finance products, including RMBS, had been rated by MIS's Structured Finance group using a "static" approach for projecting expected losses. Under the "static" approach, MIS measured a specific RMBS deal's performance at a specific point in time by evaluating the transaction structure default triggers, and credit enhancements in relation to expected loss scenarios. A primary ratings group within Structured Finance provided the initial rating for RMBS when it was issued, and a surveillance group monitored the ratings on those securities on at least an annual basis.

14. MIS's Credit Policy group reviewed and approved rating methodologies that MIS used and oversaw the use of various models in those rating methodologies. New rating methodologies, and changes to established rating methodologies, had to be approved by a Credit Policy Committee comprised of senior Credit Policy employees (or a subcommittee thereof). The Model Management and Verification Group (the "Model Team") in Credit Policy was responsible for verifying the accuracy and reliability of certain models used in the ratings process and developing policies and procedures for the verification of such models.

[3] By 2007, investment in RMBS and in financial derivatives linked to RMBS was widespread in the United States and in foreign markets. Issuance of RMBS by non-governmental agencies totaled $715 billion in 2007. Of the total 575 RMBS offerings in 2007, MIS rated 421, or 74.6% of the, offerings. At least some of the RMBS rated by MIS in 2007 and before were still subject to surveillance by MIS during the relevant period.

[4] Release No. 62802, available at https://www.sec.gov/litigation/investreport/34-62802.htm.

**Moody's Analytics Develops a Cashflow Waterfall Model Library for RMBS Deals**

15. In December 2006, MCO acquired Wall Street Analytics, a software company specializing in structured finance, and the renamed entity, Moody's Wall Street Analytics, became a subsidiary of MCO and an affiliate of MIS. Moody's Wall Street Analytics eventually became part of MA. At that time, MA formed its Structured Analytics and Valuation unit, which developed and marketed, among other things, tools for modeling and valuing various components of structured finance transactions, such as RMBS.

16. One of the modeling tools marketed by MA Structured Analytics and Valuation was the Structured Finance Workstation ("SFW"), which performs cashflow waterfall modeling. The terms of specific securities issuances, such as RMBS, are coded into SFW computer script, and the SFW projects future cashflows for specific tranches of an RMBS transaction, so that they can be analyzed. The SFW program itself is commonly referred to as the "calculation engine," while the individual deal-specific cashflow scripts are often referred to as the "waterfall scripts" or "waterfall models."

17. Beginning in 2007, MA Structured Analytics and Valuation developed a "library" of RMBS deal-specific cashflow waterfall models for use in the SFW. The process of coding the waterfall models required financial engineers to read and code into computer script the highly complex terms of the voluminous deal documents that governed each RMBS. From 2007 to 2009, MA coded waterfall models for between 5,000 and 6,000 RMBS offerings. At least in part to bring the cashflow waterfall model library to market quickly, MA outsourced most of the coding of the waterfall models to two vendors in Asia.

18. Due to the complexity of the transaction structures and the difficulty of coding them accurately, the risk of error was high, which made it necessary that the models undergo a rigorous quality control ("QC") or quality assurance ("QA") process prior to being marketed to MA's customers, especially to MIS. As one MA supervisor noted when MIS began using the models, "The waterfall accuracy demanded by the rating agency requires a huge time commitment on each deal. The level of complexity within the structures also results in a higher potential error rate."

19. Despite this, MA did not establish a consistent or rigorous quality control process over the coding of the waterfall models: MA engineers were not formally tested or evaluated following initial training, written guidelines on suggested processes for quality control were considered only informal guidance, and MA did not consistently document whether a quality control process had been completed or what steps had been taken.

20. By mid-2009, after much of the waterfall library had been coded, MA became aware of red flags that the waterfall models had errors. One MA engineer expressed concern about the accuracy of the waterfall models, commenting that one "cannot open a deal from deal library [sic] with any confidence."

21. In the fall of 2009, MA engaged an independent consulting firm to draft a "customer assurance report" for MA's external clients that outlined MA's quality controls and practices with respect to developing and maintaining the deal library. That report was never

finalized. In a September 2009 email, a senior member of the independent consulting firm's engagement team noted, "On the surface, there appears to be decent control activities, but many are relatively informal and potentially incomplete…[MA] still views itself as more entrepreneurial and fast-moving than the rating agency side. Its processes reflect that. Some efforts will likely be required to enhance the control environment to a point where it is ready to be independently tested on an ongoing basis."

**MIS Incorporated the MA SFW, Including MA Waterfall Models, Into Its RMBS Rating Methodology in 2010**

22. Under MIS's new RMBS rating approach, MIS's Structured Finance group evaluated potential losses by conducting a cashflow analysis. The purpose of the cashflow analysis was to evaluate more precisely how principal, interest, and other payments from RMBS would be allocated among the different classes and holders of the securities, as provided for by the terms of the RMBS's offering documents. As noted above, prior to 2010, Structured Finance used a "static" approach for projecting expected losses.

23. At some point between 2008 and 2010, Structured Finance proposed to Credit Policy that MIS incorporate SFW, including the waterfall model library, into its rating methodology for RMBS surveillance. However, neither Credit Policy nor Structured Finance systematically applied sufficient quality control measures to the waterfall models, adequately evaluated the accuracy of the waterfall models that were reviewed, or conducted reasonable due diligence about the procedures that MA had used to develop and test the models before MIS began using the models in its RMBS surveillance process.

24. In 2010, Structured Finance began using models from the MA waterfall model library in the methodology for rating, and annually surveilling previously-rated, RMBS, having not conducted sufficiently meaningful due diligence or quality assurance on the models. At that time, there were Structured Finance analysts that did not know, for example, that MA had outsourced the coding of the models to firms in Asia, or how the coding was being done.

25. In 2010, MIS and MA executed two agreements governing their relationship with regard to the waterfall model library. The agreements specified that the services provided by MA were "Important Operational Functions." As discussed below, this designation was significant because under MIS's Outsourcing Policies and Procedures, "Important Operational Functions" were subject to specific internal controls. Another provision required MIS and MA to meet and confer to discuss the implementation of specific "service levels" and to set forth those service levels in a written agreement. "Service levels" specified contractual terms that MIS required from outsource providers, such as quality control procedures, accuracy levels, and timeliness expectations. Notwithstanding that the 2010 agreements required MIS and MA to memorialize detailed service levels, MIS did not begin discussing such terms with MA in earnest until 2012, and did not implement an agreement specifying service levels until 2013, as discussed below.

26. In its August 2010 21(a) Report, the Commission expressly put MIS on notice of its internal controls obligations with regard to procedures and methodologies for determining credit ratings. The 21(a) Report concerned an incident in which an MIS rating committee in

Europe had discovered an inadvertent coding error in a model for rating newly created instruments called constant proportion debt obligation notes. Although the coding error increased the model output by 1.5 to 3.5 rating notches, the MIS rating committee did not downgrade the credit ratings after correcting the error because of reputational risk, in violation of then-existing MIS procedures. In the Report, the Commission noted that the recently-enacted NRSRO internal controls provisions were self-executing and cautioned that NRSROs "should implement sufficient and requisite internal controls over policies, procedures, and methodologies used to determine credit ratings."

**From 2010 to 2012, MIS Became Aware of Numerous Red Flags Regarding The Unreliability of the MA Waterfall Models**

27. At the time that MIS began using the MA cashflow waterfall models in its RMBS rating methodology, MIS was aware of the complexities inherent in the waterfall models and the significant risk of rating inaccuracies posed by potential model errors. In March 2010, a senior credit officer in Credit Policy who served as the liaison to Structured Finance, acknowledged the importance of having adequate quality control over the waterfall models: "[T]hey are COMPLEX waterfalls potentially. AND I would not want to have errors there…." (emphases in original)

28. After the SFW and the cashflow waterfall models had been incorporated into MIS's RMBS rating methodology, Structured Finance ratings analysts began encountering recurrent problems with the models. In a March 2012 email, one Structured Finance rating analyst observed to MA, "I am very concerned about all the modeling issues being observed in SFW. Every time we raise an issue, the reason provided varies…." A November 2012 internal memo circulated among RMBS ratings analysts noted, "We continue to observe multiple coding errors pertaining to loss allocation limitations, super-senior supports not coded correctly," and noted that analysts' confidence in the waterfall models was low.

29. Credit Policy also was aware of the errors and defects that were being encountered in the cashflow waterfall models. By mid-2012, Credit Policy's internal error tracking system showed that an unusually high number of errors were attributable to the waterfall models. Despite the persistence of these issues over time, MIS continued using the models in its annual surveillances of RMBS.

**From 2010 to 2013, MIS Failed to Apply its Existing Outsourcing Policies and Procedures to, or Establish Other Internal Controls Over, the Use of MA Waterfall Models**

30. In July 2010, MIS implemented formal policies and procedures that were to be applied to vendors that supplied certain products or services to MIS (the "July 2010 Outsourcing Policy" and the "July 2010 Outsourcing Procedure"). Although MIS and MA were affiliates, MIS's business relationship with MA qualified as an "outsourcing" relationship under the policy and procedure, similar to MIS's arrangements with unaffiliated third-party vendors. During the relevant time period, the Document Management Group, a unit of MCO, principally was responsible for administering the Outsourcing Policies and Procedures for MIS and other MCO

units. The Document Management Group also had a role in drafting the Outsourcing Policies and Procedures and in implementing several of the provisions.

31. By their terms, the July 2010 Policy and Procedure applied to "any outsourcing relationship for an 'important operational function' entered into by MIS entities or proposed to be entered into by MIS entities, including external (including non-controlled affiliates) and internal (inter-company) outsourcing arrangements." The July 2010 Outsourcing Procedure, which specified the steps that were to be taken in selecting, contracting with, monitoring, and managing an outsource provider, called for MIS to "[p]ut in place procedures to monitor and assess the performance of the Service Provider. The Outsourced functions should be monitored against any agreed quantitative and qualitative service level standards/ performance." The July 2010 Outsourcing Procedure also required MIS to "[a]dopt measures to identify and report instances of performance or non-compliance, such as service delivery reports, self-certification or independent review by auditors."

32. The July 2010 Outsourcing Procedure also required MIS to maintain a Master Outsourcing List containing details of all outsourcing arrangements as defined by the Outsourcing Policy. In addition, the Document Management Group was tasked with requiring each "Business Owner" of an outsourcing relationship listed on the Master Outsourcing List to confirm annually that the outsourcing arrangement was up to date and being actively monitored for, among other things, the quality of the service or product that was being provided to MIS. "Business Owner" was defined in a later version of the procedure as the MIS "point of contact with the respective external Service Provider."

33. In September 2011, MIS adopted a revised Outsourcing Procedure ("September 2011 Outsourcing Procedure") that superseded the July 2010 Outsourcing Procedure (the July 2010 Outsourcing Policy was not revised at this time and remained in effect). The September 2011 Outsourcing Procedure incorporated most of the requirements of the July 2010 Outsourcing Procedure, but assigned responsibility for performance monitoring and documentation to the respective "Business Owner" of each outsourcing arrangement and made the Document Management Group responsible for maintaining the Master Outsourcing List and conducting the annual reviews. The September 2011 Outsourcing Procedure also specified that, upon completion of annual reviews, the Document Management Group and Business Owners would discuss issues and concerns identified with regard to each outsourcing provider and would devise remediation plans to address those problems.

34. The September 2011 Outsourcing Procedure also expanded certain provisions relating to contracts with outsource providers by requiring that MIS's outsourcing agreements contain certain "key features to retain an appropriate level of control over the services [that MIS] outsources," such as specific service level requirements and reporting obligations with regard to service levels.

35. MA was a covered outsource provider under the Outsourcing Policies and Procedures. The July 2010 Outsourcing Policy and Procedure covered outsourcing arrangements between MIS and outsourcing providers, including affiliated entities, that fulfill an "important operational function." The 2010 Order Form between MIS and MA specified that the services provided by MA thereunder were "important operational functions."

36. From 2010 to late 2013, MIS failed to apply its Outsourcing Policies and Procedures to its relationship with MA and, in particular, the use of MA waterfall models in its RMBS rating methodology. MIS also failed to include MA on its Master Outsourcing List from 2010 to 2013. Even though MIS and MA were in *ad hoc* contact about SFW and the waterfall models, in contravention of its Outsourcing Policies and Procedures MIS failed to monitor and evaluate MA's performance as an outsource provider, and the quality and accuracy of its models, against any specified quantitative and qualitative service levels. MIS also did not adopt measures to identify and report instances of MA's unsatisfactory performance, as required by the Outsourcing Policies and Procedures.

37. MIS did not conduct annual reviews of the model procurement process with MA, or designate a Business Owner to oversee and complete any internal control checklists documenting the quality of service and products supplied by MA. MIS did not maintain specific documentation showing that MIS annually monitored MA or had developed remediation plans in response to any annual reviews as set forth in the Outsourcing Policies and Procedures' provisions. Further, MIS did not apply to the relationship with MA any of the requirements for outsourcing contracts that were added under the September 2011 Outsourcing Procedure, including the specific service level requirements and reporting obligations. MIS did not execute any additional agreements with MA until late 2013, over two years after the September 2011 Outsourcing Procedure was instituted.

38. Apart from its failure to apply the Outsourcing Policies and Procedures to its use of models from MA, MIS did not establish any other effective internal control structure or process with regard to the MA-sourced waterfall models. Both MIS's Structured Finance and Credit Policy groups became aware of the accumulation of errors that were being encountered in the waterfall models from the inception of the models' use in MIS's RMBS rating and annual surveillance methodologies and, at various times, expressed concerns about the quality control process at MA. Despite this, neither group developed consistently-applied internal controls for the use of the MA waterfall models.

39. MIS Structured Finance, which used the cashflow waterfall models in conducting annual surveillance on RMBS ratings, did not develop an effective quality control process to ensure the accuracy of the models. Instead, MIS ratings analysts and committees reviewed the output of the models under various scenarios to see if they "looked reasonable" as compared to the deal documents. Informal guidelines for these reviews were generated by, and shared among, the ratings team, but they varied from analyst to analyst, changed over time, and were considered merely guidelines, not procedures that were required to be applied consistently to all MA-sourced models. Moreover, Structured Finance analysts did not systematically maintain records verifying that particular models had been reviewed for accuracy by MIS analysts, nor did they systematically document the steps that may have been taken in performing such reviews.

40. Credit Policy, in light of its responsibility for approving changes to rating methodologies, and given the expertise of the Model Verification Team, also could have implemented internal controls with regard to the waterfall models. However, during the period from 2010 to 2012, Credit Policy never asserted formal responsibility over the model use or took any steps to establish effective controls. Credit Policy personnel were aware that MA had not established sufficient quality assurance procedures for the coding and review of the waterfall

models. In July 2011, after the MA waterfall models had been incorporated into the RMBS rating methodology, a senior Credit Policy official inquired whether Credit Policy felt "comfortable" with the models and whether there was a concern with their use, noting that the RMBS ratings team was using SFW "massively." Later in the same email chain, the head of the Model Team noted, "[MA] mentioned waterfall checks against a third party model done by [an external consultant] but, even though we've asked a few times, we don't really know what the scope of [the external consultant's] verification was, and we've not seen any QA reports…." Thus, although Credit Policy personnel were aware that MA had commissioned an external review of its cashflow waterfall models, the head of the Model Team at the time was not aware of the scope or results of that review.

41. At least as of 2012, MIS Credit Policy was aware that the waterfall models were highly complex and that a significant number of model errors were being encountered by MIS analysts who were using the models. MIS Credit Policy, however, did not determine whether MA had established defined quality control procedures over the coding of the waterfall models. Despite this, Credit Policy did not include the waterfall models in its model verification mandate, and did not obtain proof or third-party certification of MA's quality assurance process with respect to the waterfall models. In October 2012, Credit Policy issued formal policies and procedures on model verification that governed third party models, but MIS omitted the MA cashflow waterfall models from the scope of these policies. As a result, no one in Credit Policy was given responsibility for verifying the accuracy of waterfall models or assessing the adequacy of any quality controls that MA applied to the development of the waterfall models.

42. Although MIS Structured Finance and Credit Policy began discussions with MA in 2012 to formalize a new service level agreement addressing MA's quality control process that would be applied to the waterfall models in the future, a new service level agreement was not finalized at that time.

**After Additional Significant Model Errors Were Encountered, MIS Began Evaluating Internal Controls over the Waterfall Model Library in 2013**

43. In late 2012, after a third-party guarantor of RMBS questioned MIS about losses attributed to certain RMBS that MIS had rated using a methodology that incorporated the MA waterfall models, MIS requested that MA perform a detailed review of the waterfall models against the deal documents.

44. This review revealed that a key structural feature of a particular series of RMBS offerings that had been detailed in the deal documents had been incorrectly scripted into the waterfall models for these transactions. Due to these errors, MIS placed 43 tranches from the RMBS series, worth $1.2 billion, on review for downgrade in March 2013. After the errors in the waterfall models were corrected, MIS downgraded 28 tranches in June 2013. Of these, 16 tranches had a 10-notch downgrade or greater, which caused the tranches to be downgraded from MIS's highest investment grade rating of Aaa to non-investment or "junk" rating.

45. The errors, however, were not limited to that particular series of RMBS. After discovering those errors, MIS and MA identified 162 other RMBS ratings that potentially had the same types of errors. On April 29, 2013 and May 14, 2013, MIS placed various tranches of

these 162 RMBS ratings on review. Subsequently, from June to October 2013, MIS announced corrective rating actions on at least 171 RMBS ratings with a notional value of over $25 billion, that were due at least in part to errors in waterfall model that MIS had procured from MA.

46. In April 2013, Moody's hired outside consultants to review the waterfall model library and opine on its accuracy and reliability. The consultants found errors in many of the models that they reviewed, including additional errors in models that already had been corrected. The consultants also observed several deficiencies in both MIS's and MA's quality control processes pertaining to the waterfall model library. For example, the consultant noted that MIS does not review the waterfall model scripts or compare models to other third party models, and that MA had inconsistent model documentation, review, and approval processes over time. One consultant who had worked on both the 2009 and 2013 model review engagements at Moody's reflected on the 2009 review to a colleague: "They were so off on some of the deals it was really scary . . . ugly stuff . . . The thing is a lot of these deals were ridiculously complex and these guys had [to] churn out models on like a weekly basis. There was no way they could've properly ensured everything was correct or done sufficient testing."

47. In mid-2013, in response to the discovery of the numerous errors described above, MIS and MA agreed informally that MA would implement certain corrective quality control processes on cashflow waterfall models that MA had supplied to MIS, including that a second engineer would review any changes made to correct errors in models. However, MIS did not make the added quality control processes mandatory through a service level agreement, as required by MIS's Outsourcing Policies and Procedures, and MIS continued discovering significant waterfall model errors.

48. Also in 2013, MCO's Internal Audit group conducted an audit of MA Structured Analytics and Valuation as part of its regular audit schedule. Internal Audit has independent auditing responsibility over all MCO businesses, including MIS and MA. Internal Audit found that the processes and controls related to the SFW library were unsatisfactory and required immediate attention. In its final report, Internal Audit observed, "Our review disclosed the library was created without support for how the contractual terms were interpreted nor referenced from the contractual terms to a configuration document. We also identified there was no formal documentation evidencing an independent review of these configurations or subsequent changes. While management periodically cycles through more complex deals to identify errors, we identified that this process is not formal, nor is the level of review tracked."

49. Following the discovery of these significant errors, the external consultants' review, and Internal Audit's critical assessment of MA Structured Analytics and Valuation, in late 2013, MIS began to move toward establishing a more formal quality control process for the SFW waterfall model library that met the requirements of the outsourcing policies and procedures. In October 2013, MIS signed an agreement with MA that specified service levels, including specific quality control procedures for new waterfall models and for the correction of errors in existing waterfall models. In December 2013, MIS executed an additional agreement with MA that specified additional service level terms relating to quality control processes over the waterfall models. Despite these agreements and the enhanced internal controls with regard to MA and the use of models procured from MA, MIS and MCO continued to encounter problems with internal controls over outsourcing.

50. MIS continued finding errors in waterfall models and, during the three-year period from January 2013 through January 2016, MIS corrected over 650 RMBS ratings, with a notional value of over $49 billion, at least in part due to errors in waterfall models.

**2014 MCO Internal Audit Preliminary Finding of Deficiency Concerning Internal Controls over Outsourcing**

51. Beginning in late 2013, as part of its regular audit schedule of MCO business units, MCO's Internal Audit began an audit of processes and controls governing outsourcing arrangements during the period September 2013 to May 2014, which was separate and unrelated to the prior audit of MA Structured Analytics and Valuation. The audit was conducted by the head of Internal Audit and several staff members and continued into mid-2014.

52. The audit team preliminarily found that MCO's processes and controls over outsource arrangements generally were "unsatisfactory and . . . not designed and operating reasonably." In late 2014, Internal Audit closed its audit of MCO's processes and controls governing outsourcing arrangements during the period September 2013 to May 2014 without issuing a final report.

**MIS Failed to Document Rationales for Issuing Ratings that Deviated from the Model-Implied Ratings**

53. Section 17(a) of the Exchange Act requires NRSROs to "make and keep for prescribed periods" certain records as required by Commission rules. Rule 17g-2(a)(2) requires an NRSRO to make and retain records with respect to each current credit rating indicating, if a quantitative model was a substantial component in the process of determining the credit rating of a security or money market instrument issued by an asset pool or as part of any asset-backed securities transaction, a record of the rationale for any material difference between the credit rating implied by the model and the final credit rating issued. In fifty-four instances, MIS failed to document in its RMBS rating files the rationale for the difference between the model-implied rating and the rating that MIS ultimately published with respect to each credit rating.

## Violations

54. As a result of the conduct described above, MIS violated Section 15E(c)(3)(A) of the Exchange Act, which requires NRSROs to "establish, maintain, enforce, and document an effective internal control structure governing the implementation of and adherence to policies, procedures, and methodologies for determining credit ratings."

55. As a result of the conduct described above, MIS violated Section 17(a)(1) of the Exchange Act and Rule 17g-2(a)(2) thereunder, which prescribe certain record-keeping responsibilities for NRSROs with regard to the credit rating process.

## Undertakings

MIS has undertaken to do the following:

56. MIS will retain the services of an independent consultant that is not unacceptable to the staff of the U.S. Securities and Exchange Commission's Division of Enforcement and Office of Credit Ratings ("Staff"). The Independent Consultant's compensation and expenses shall be borne exclusively by MIS.

57. MIS shall require that the Independent Consultant perform the following duties:

A. review MIS internal controls governing Moody's Analytics cashflow waterfall models used in MIS's rating of RMBS ("Waterfall Models"), including all applicable policies and procedures and service level agreements, to determine whether those controls are reasonably designed to prevent, detect and remedy errors in the Waterfall Models;

B. make recommendations with respect to MIS's internal controls, including all applicable policies and procedures and service level agreements, regarding:

i. model management, verification, and validation as it applies to the Waterfall Models;

ii. its oversight and management of outsourcing arrangements as it applies to the Waterfall Models;

iii. its control functions', including but not limited to Internal Audit and Compliance, oversight with respect to these internal controls; and

C. test MIS's compliance with the requirement in Rule 17g-2(a)(2)to document the rationale for material differences between the credit rating implied by the model and the final credit rating issued and make recommendations, as necessary.

58. MIS shall require the Independent Consultant to submit, within 180 days of the entry of this order, a written and dated report of its findings and recommendations to MIS board of directors, MIS senior management, and the Staff.

59. MIS will work with the Independent Consultant to implement the recommendations, and where necessary, will consult with the Staff on any recommendations that MIS considers unduly burdensome or would have difficulty implementing for other reasons.

60. MIS will submit a final report to the Staff, approved and signed by MIS's global Chief Credit Officer and head of Credit Strategy and Standards (formerly Credit Policy) detailing its implementation of the recommendations made by the Independent Consultant (or of the revised recommendations based upon consultation with Staff) within 365 days of the entry of this order.

61. MIS shall require the Independent Consultant to enter into an agreement that provides that for the period of engagement and for a period of two years from completion of the engagement, the Independent Consultant shall not enter into any employment, consultant, attorney-client, auditing or other professional relationship with MIS, or any of its present or former affiliates, directors, officers, employees, or agents acting in their capacity. The agreement will also provide that the Independent Consultant will require that any firm with which he/she is affiliated or of which he/she is a member, and any person engaged to assist the Independent Consultant in performance of his/her duties under this Order shall not, without prior written consent of the Director of the SEC's Division of Enforcement, enter into any employment, consultant, attorney-client, auditing or other professional relationship with MIS, or any of its present or former affiliates, directors, officers, employees, or agents acting in their capacity as such for the period of the engagement and for a period of two years after the engagement.

62. The President of MIS, on behalf of MIS, will certify, in writing, MIS's compliance with the undertakings set forth above. The certification shall identify the undertakings, provide written evidence of compliance in the form of a narrative, and be supported by exhibits sufficient to demonstrate compliance. The Commission staff may make reasonable requests for further evidence of compliance, and MIS agrees to provide such evidence. The certification and supporting material shall be submitted to Antonia Chion, Associate Director, Division of Enforcement, Securities and Exchange Commission, 100 F Street, N.E., Washington, DC 20549, with a copy to the Office of Chief Counsel of the Enforcement Division, no later than sixty (60) days from the date of the completion of the undertakings.

63. For good cause shown, the Staff may extend any of the procedural dates relating to the undertakings. Deadlines for procedural dates shall be counted in calendar days, except that if the last day falls on a weekend or federal holiday, the next business day shall be considered the last day.

**IV.**

In view of the foregoing, the Commission deems it appropriate to impose the sanctions agreed to in MIS's Offer.

Accordingly, it is hereby ORDERED that:

A. Pursuant to Section 21C of the Exchange Act, MIS cease and desist from committing or causing any violations and any future violations of Sections 15E(c)(3)(A) and 17(a)(1) of the Exchange Act and Exchange Act Rule 17g-2(a)(2) thereunder.

B. MIS shall comply with the undertakings enumerated in Paragraphs 56-63 above.

C. MIS shall, within ten (10) days of the entry of this Order, pay a civil money penalty in the amount of $15,000,000.00 to the Securities and Exchange Commission for transfer to the general fund of the United States Treasury, subject to Exchange Act Section 21F(g)(3). If timely payment of the civil money penalty is not made, additional interest shall accrue pursuant to 31 U.S.C. § 3717.

Payment must be made in one of the following ways:

(1) Respondent may transmit payment electronically to the Commission, which will provide detailed ACH transfer/Fedwire instructions upon request;

(2) Respondent may make direct payment from a bank account via Pay.gov through the SEC website at http://www.sec.gov/about/offices/ofm.htm; or

(3) Respondent may pay by certified check, bank cashier's check, or United States postal money order, made payable to the Securities and Exchange Commission and hand-delivered or mailed to:

Enterprise Services Center
Accounts Receivable Branch
HQ Bldg., Room 181, AMZ-341
6500 South MacArthur Boulevard
Oklahoma City, OK 73169

Payments by check or money order must be accompanied by a cover letter identifying MIS as a Respondent in these proceedings, and the file number of these proceedings; a copy of the cover letter and check or money order must be sent to Antonia Chion, Associate Director, Division of Enforcement, Securities and Exchange Commission, 100 F St., N.E., Washington, DC 20549.

D. Amounts ordered to be paid as civil money penalties pursuant to this Order shall be treated as penalties paid to the government for all purposes, including all tax purposes. To preserve the deterrent effect of the civil penalty, Respondent agrees that in any Related Investor Action, it shall not argue that it is entitled to, nor shall it benefit by, offset or reduction of any award of compensatory damages by the amount of any part of Respondent's payment of a civil penalty in this action ("Penalty Offset"). If the court in any Related Investor Action grants such a Penalty Offset, Respondent agrees that it shall, within 30 days after entry of a final order granting the Penalty Offset, notify the Commission's counsel in this action and pay the amount of the Penalty Offset to the Securities and Exchange Commission. Such a payment shall not be deemed an additional civil penalty and shall not be deemed to change the amount of the civil penalty imposed in this proceeding. For purposes of this paragraph, a "Related Investor Action" means a private damages action brought against Respondent by or on behalf of one or more investors based on substantially the same facts as alleged in the Order instituted by the Commission in this proceeding.

By the Commission.

Brent J. Fields
Secretary