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## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-85128; File No. SR-ICEEU-2018-024]

### **Self-Regulatory Organizations; ICE Clear Europe Limited; Order Approving Proposed Rule Change, as Modified by Amendment No. 1, Relating to the ICE Clear Europe Model Risk Governance Framework**

February 13, 2019

#### **I. Introduction**

On November 21, 2018, ICE Clear Europe Limited (“ICE Clear Europe”) filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change to adopt a Model Risk Governance Framework (“MRGF”) and related Independent Validator Selection Guidelines (“Guidelines”). On December 21, 2018, ICE Clear Europe filed Amendment No.1 to the proposed rule change.<sup>3</sup> The proposed rule change, as modified by Amendment No. 1, was published for comment in the Federal Register on December 31, 2018.<sup>4</sup> The Commission did not receive comments on

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<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> The amendment clarified Items 1(a) and 2(a) in the Form 19b-4 but did not change any other items in Form 19b-4, any exhibits to the filing, or the text of the proposed rule change.

<sup>4</sup> Securities Exchange Act Release No. 84933 (Dec. 21, 2018), 83 FR 67810 (Dec. 31, 2018) (SR-ICEEU-2018-024) (“Notice”).

the proposed rule change. For the reasons discussed below, the Commission is approving the proposed rule change.

## II. Description of the Proposed Rule Change

The proposed rule change would adopt a new MRGF and related Guidelines. The MRGF would establish overall standards and principles for managing and mitigating model risk for all product categories that ICE Clear Europe clears.<sup>5</sup> Specifically, the MRGF would (1) establish a definition of model and model risk; (2) establish and define criteria for assessing the materiality and significance of models and model changes; (3) establish procedures for oversight and validation of models and model changes; and (4) establish related governance structures. The MRGF would apply to models developed internally, third-party models, and models shared with other group entities (but not to models in research and development or that are already retired), and would apply throughout the life cycle of all such models used by the Clearing House. In addition, the Guidelines would establish standards for the independence and competence of the persons that validate models pursuant to the MRGF.

### A. Definition of Model and Model Changes

The MRGF would define a “model” as a quantitative method, system or approach that applies statistical, economic, financial or mathematical theories, techniques and assumptions to process input data into quantitative estimates.<sup>6</sup> The MRGF would also

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<sup>5</sup> Capitalized terms not otherwise defined herein have the meaning given to them in the MRGF or the ICE Clear Europe rulebook.

<sup>6</sup> Notice, 84 FR at 67811.

define “model risk” as the risk that a model does not perform as it was designed, either due to error or failure in the model specification or inappropriate use.<sup>7</sup>

The MRGF would assess the materiality of models based on the potential impact the related model risk may have on ICE Clear Europe and its clearing members. In particular, the MRGF would treat a model as material where the output of the model is the primary factor affecting risk management decisions relating to counterparty and liquidity risk.<sup>8</sup> The MRGF may also treat a model as material if it has a high error potential with sizeable impact resulting from: (1) complexities in the data model and inputs (like complex manipulation of input data); (2) the modelling approach (such as reliance on a large number of assumptions); (3) the model output (such as a large number of other models dependent on the output); or (4) model users and operations (such as a large number of independent systems that use the model).<sup>9</sup>

With respect to model changes, the MRGF would categorize changes as significant and not significant. In determining whether a model change is significant, the MRGF would consider the size of resulting changes in risk requirements calculated by the model, alterations in the scope of model use and the risk profile of products covered, and the development of new model features.<sup>10</sup>

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<sup>7</sup> Notice, 84 FR at 67811.

<sup>8</sup> Notice, 84 FR at 67811.

<sup>9</sup> Notice, 84 FR at 67811, n.5.

<sup>10</sup> Notice, 84 FR at 67811.

B. Oversight and Validation of Models and Model Changes

The MRGF would set out a general oversight process for models throughout their life cycle, including development of new models, model changes, review of existing models, and model retirements. For new models, the MRGF would require that they be subject to validation before being approved and introduced into use.<sup>11</sup> For model changes, the MRGF would require that significant changes be validated before being approved using the same process as for new models.<sup>12</sup> The MRGF would validate model changes that are not significant in accordance with ICE Clear Europe's periodic re-validation pipeline, as discussed below.<sup>13</sup>

The MRGF would re-validate and assess the performance of models to determine whether they continue to be fit for use. The Risk Oversight Department ("ROD") would establish a validation pipeline, meaning a periodic cycle for re-validation of existing models.<sup>14</sup> The ROD would establish the frequency of re-validation based on applicable regulatory requirements, which may be annually where required or more frequently as needed.<sup>15</sup> Similarly, the MRGF would require that performance assessments be conducted on a periodic basis at least annually, in accordance with applicable regulatory requirements.<sup>16</sup>

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<sup>11</sup> Notice, 84 FR at 67811.

<sup>12</sup> Notice, 84 FR at 67811.

<sup>13</sup> Notice, 84 FR at 67811.

<sup>14</sup> Notice, 84 FR at 67811.

<sup>15</sup> Notice, 84 FR at 67811.

<sup>16</sup> Notice, 84 FR at 67811.

The MRGF would make the ROD responsible for conducting the independent validation (if done internally) at the appropriate frequency and coordinating an external independent validation when appropriate.<sup>17</sup> The Guidelines would establish both technical expertise and independence requirements for model validations.<sup>18</sup> The Guidelines would provide that the Clearing House may engage an external independent model validator when (1) there are insufficient internal resources to meet both the technical expertise and independence requirements for the model undergoing independent validation; (2) internal resources do not have the operational capacity to perform the validation within the required timeframe; or (3) otherwise at the discretion of the ROD.<sup>19</sup>

Under the MRGF and the Guidelines, ICE Clear Europe's Model Oversight Committee ("MOC") would be required to review and approve the use of external independent model validators.<sup>20</sup> The ROD would maintain a list of external validators approved by the MOC.<sup>21</sup> The Guidelines would provide that the MOC may decide, for models deemed complex and material, to perform a competitive selection process for external independent validators. Similarly, the ROD may, with the consent of the MOC, split components of the independent model validation scope across one or more external independent validators.

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<sup>17</sup> Notice, 84 FR at 67811.

<sup>18</sup> Notice, 84 FR at 67811.

<sup>19</sup> Notice, 84 FR at 67811.

<sup>20</sup> Notice, 84 FR at 67812.

<sup>21</sup> Notice, 84 FR at 67812.

The MRGF would also provide a process for model retirements and deactivations (retirement would permanently discontinue a model while deactivation would be a temporary discontinuation).<sup>22</sup> Prior to retiring or deactivating a model, the MRGF would require an impact assessment of the risks and consequences of such retirement or deactivation.

### C. Governance

The MRGF would establish the roles of the MOC and ICEEU Board in controlling overall model risk, including reviewing and approving models and changes. Under the MRGF, the MOC would be responsible for model risk governance at an executive level and for advising the Board on material model risk.<sup>23</sup> Under the MRGF, the MOC also would be responsible for approving new models, model changes, retirement of models, the periodic validation cycle, remediation actions, external validators, and reviewing model performance assessments.<sup>24</sup> The MRGF would assign the ICE Clear Europe Board ultimate responsibility for model risk governance, approving material new models and significant model changes for material models, reviewing the actions of the MOC, reviewing performance of material models outside of acceptable levels for model risk, and reviewing impact assessments for the retirement of material models.<sup>25</sup>

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<sup>22</sup> Notice, 84 FR at 67811.

<sup>23</sup> Notice, 84 FR at 67811.

<sup>24</sup> Notice, 84 FR at 67811.

<sup>25</sup> Notice, 84 FR at 67811.

The MRGF would further apply a three-tiered approach to the development and validation of models and changes. Specifically, the MRGF would: (1) designate the owner of the models as the First Line; (2) designate the ROD as the Second Line; and (3) designate the Internal Audit Department as the Third Line. The First Line (owners of the models) would be responsible for ensuring that models are properly developed, implemented and used, establishing a model inventory, proposing new models, proposing model changes, proposing model retirements, conducting performance and impact assessments, and proposing and implementing remediation actions as needed. The Second Line (ROD) would be responsible for performing or overseeing independent validations, reviewing and performing performance assessments, establishing risk appetite metrics for model performance, establishing guidelines for validations and external validators, and reporting results of validations and assessments. The Third Line (Internal Audit Department) would be responsible for assessing the overall effectiveness of the MRGF and related governance policies and assessing independent validation work.<sup>26</sup>

### III. Commission Findings

Section 19(b)(2)(C) of the Act directs the Commission to approve a proposed rule change of a self-regulatory organization if it finds that such proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to such organization.<sup>27</sup> For the reasons given below, the Commission finds

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<sup>26</sup> Notice, 84 FR at 67811.

<sup>27</sup> 15 U.S.C. 78s(b)(2)(C).

that the proposed rule change is consistent with Section 17A(b)(3)(F) of the Act<sup>28</sup> and Rules 17Ad-22(e)(2)(i) and (v), (e)(3), (e)(4)(vii), (e)(6)(vii), and (e)(7)(vii) thereunder.<sup>29</sup>

A. Consistency with Section 17A(b)(3)(F) of the Act

Section 17A(b)(3)(F) of the Act requires, among other things, that the rules of ICE Clear Europe be designed to promote the prompt and accurate clearance and settlement of securities transactions and, to the extent applicable, derivative agreements, contracts, and transactions, as well as to assure the safeguarding of securities and funds which are in the custody or control of ICC or for which it is responsible, and, in general, to protect investors and the public interest.<sup>30</sup>

As discussed above, the proposed rule change would adopt the MRGF and Guidelines. The MRGF would establish overall standards and principles for managing and mitigating model risk for all product categories that ICE Clear Europe clears. The MRGF would do so by establishing processes for the oversight and validation of models and changes to models and defining related governance responsibilities. Finally, the Guidelines would help ensure the independence and competence of validations by establishing standards for model validators regarding independence and technical proficiency.

The Commission believes that these changes, taken as a whole, would help ICE Clear Europe establish and maintain effective and functioning models. For example, in

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<sup>28</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>29</sup> 17 CFR 240.17Ad-22(e)(2)(i) and (v), (e)(3), (e)(4)(vii), (e)(6)(vii), and (e)(7)(vii).

<sup>30</sup> 15 U.S.C. 78q-1(b)(3)(F).

requiring the validation of new models and significant model changes, the Commission believes that the MRGF would help ICE Clear Europe to identify and remediate possible errors in models and changes thereto before such models or changes are put into effect. Doing so may help ICE Clear Europe avoid the potential harm that could result from models that do not function properly, such as margin requirements that are not effective at mitigating risk. Similarly, the Commission believes that the Guidelines, in establishing standards for independence and technical proficiency of validators, would help ensure that validations are completed objectively and competently. Because biased or ineffective validations could miss potential errors in models and model changes, the Commission believes that the Guidelines may also help ICE Clear Europe avoid the potential harm that could result from models that do not function properly.

Given that ICE Clear Europe uses its models, such as its margin models, to manage and mitigate ICE Clear Europe's credit exposures to its Clearing Members and the risks associated with clearing security based swap-related portfolios, the Commission believes that the proposed rule change would enhance ICE Clear Europe's ability to avoid losses that could result from the mismanagement of such credit exposures and risks. Because such losses could disrupt ICE Clear Europe's ability to promptly and accurately clear security based swap transactions, by adopting the MRGF and the Guidelines, the Commission believes that the proposed rule change would enhance ICE Clear Europe's ability to promote the prompt and accurate clearance and settlement of securities transactions.

Similarly, appropriate management of ICE Clear Europe's credit exposures to its Clearing Members and the risks associated with clearing security based swap-related

portfolios is critical to avoiding the realization of losses on such portfolios that could threaten ICE Clear Europe's ability to operate, thereby threatening access to securities and funds in ICE Clear Europe's control. Because the proposed rule change would improve the processes to review and maintain the models that ICE Clear Europe uses to manage and mitigate such exposures, the Commission believes that the proposed rule change would help assure the safeguarding of securities and funds which are in the custody or control of ICE Clear Europe or for which it is responsible. Finally, for both of these reasons, the Commission believes the proposed rule change is consistent with protecting investors and the public interest.

Therefore, the Commission finds that the proposed rule change would promote the prompt and accurate clearance and settlement of securities transactions, assure the safeguarding of securities and funds in ICE Clear Europe's custody and control, and, in general, protect investors and the public interest, consistent with the Section 17A(b)(3)(F) of the Act.<sup>31</sup>

B. Consistency with Rules 17Ad-22(e)(2)(i) and (v)

Rules 17Ad-22(e)(2)(i) and (v) require that ICE Clear Europe establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for governance arrangements that are clear and transparent and specify clear and direct lines of responsibility.<sup>32</sup>

As discussed above, the MRGF would define the responsibilities of the MOC and ICEEU Board in model review and approval. For example, under the MRGF, the MOC

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<sup>31</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>32</sup> 17 CFR 240.17Ad-22(e)(2)(i) and (v).

would be responsible for approving new models, model changes, and retirement of models, while the Board ultimately would be responsible for model risk governance, and approving material new models and significant model changes for material models, among other things. In doing so, the Commission believes that the MRGF would clearly and transparently define who is responsible for which aspect of oversight of the MRGF (*i.e.*, the MOC or the Board) and specify the responsibilities of the MOC and the Board under the MRGF.

Moreover, the proposed rule change would establish the responsibilities of the first line model owners, ROD, and ICE Clear Europe Internal Audit Department in performing certain functions under, and assessing the effectiveness of, the MRGF. For example, the MRGF would make the First Line responsible for developing models, the ROD, as the Second Line, responsible for validating models, and the Internal Audit Department, as the Third Line, responsible for assessing the effectiveness of the MRGF and validations. In doing so, the Commission believes the proposed rule change would improve the transparency of the governance related to the MRGF by defining the relevant responsibilities for the development and validation of models and the review of the overall effectiveness of the MRGF. The Commission believes these aspects of the MRGF would also clearly define the responsibilities of the first line model owners, ROD, and ICE Clear Europe Internal Audit Department with respect to the MRGF.

Therefore, for the above reasons the Commission finds that the proposed rule change is consistent with Rules 17Ad-22(e)(2)(i) and (v).<sup>33</sup>

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<sup>33</sup> 17 CFR 240.17Ad-22(e)(2)(i) and (v).

C. Consistency with Rule 17Ad-22(e)(3)

Rule 17Ad-22(e)(3) requires that ICE Clear Europe establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain a sound risk management framework for comprehensively managing legal, credit, liquidity, operational, general business, investment, custody, and other risks that arise in or are borne by ICE Clear Europe which includes risk management policies, procedures, and systems designed to identify, measure, monitor, and manage the range of risks that arise in or are borne by ICE Clear Europe, that are subject to review on a specified periodic basis and approved by the board of directors annually.<sup>34</sup>

As discussed above, the MRGF would require the review and validation of new models, existing models, and model changes, which the Commission believes would identify and remediate possible errors in models and changes thereto before such models or changes are put into effect. In this way, the Commission believes the MRGF would help reduce model risk at ICE Clear Europe. Moreover, the Commission believes the Guidelines would help ensure the objectivity and competence of validations by establishing standards for model validators regarding independence and technical proficiency. The Commission believes that competent and objective validations would, in turn, help to reduce model risk. Finally, the Commission believes that the governance aspects of the MRGF discussed above would help ensure that the MRGF and its processes are effectively reviewed and maintained. Thus, the Commission believes that the proposed rule change would enable ICE Clear Europe to maintain a sound risk management framework for comprehensively managing its model risk.

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<sup>34</sup> 17 CFR 240.17Ad-22(e)(3).

Therefore, the Commission finds that the proposed rule change is consistent with Rule 17Ad-22(e)(3).<sup>35</sup>

D. Consistency with Rules 17Ad-22(e)(4)(vii), (e)(6)(vii), and (e)(7)(vii)

Rule 17Ad-22(e)(4)(vii) requires that ICE Clear Europe establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively identify, measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes, including by performing a model validation for its credit risk models not less than annually or more frequently as may be required by its risk management framework.<sup>36</sup> Rule 17Ad-22(e)(6)(vii) requires that ICE Clear Europe establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that, among other things, requires a model validation for its margin system and related models to be performed not less than annually, or more frequently as may be contemplated by its risk management framework.<sup>37</sup> Rule 17Ad-22(e)(7)(vii) requires that ICE Clear Europe establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively measure, monitor, and manage the liquidity risk that arises in or is borne by ICE Clear Europe, including measuring, monitoring, and managing its settlement and funding flows on an ongoing and timely basis, and its use of intraday liquidity by, among other things, performing a model validation of its liquidity risk models not less than

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<sup>35</sup> 17 CFR 240.17Ad-22(e)(3).

<sup>36</sup> 17 CFR 240.17Ad-22(e)(4)(vii).

<sup>37</sup> 17 CFR 240.17Ad-22(e)(6)(vii).

annually or more frequently as may be contemplated by its risk management framework.<sup>38</sup>

As discussed above, the MRGF would specify the frequency of model validations. Specifically, the MRGF would provide that model validations shall comply with applicable regulatory requirements, in particular in regards to annual validation cycles, and that model performance assessments shall also be conducted on a periodic basis, with cycles no greater than one year.

The Commission believes that these aspects of the MRGF would help ensure that ICE Clear Europe complies with the aspects of Rules 17Ad-22(e)(4)(vii), (e)(6)(vii), and (e)(7)(vii)<sup>39</sup> that require annual model validations by providing that the frequency of model validations shall comply with applicable regulatory requirements, in particular in regards to annual validation cycles, and that model performance assessments shall also be conducted on cycles no greater than one year.

Therefore, the Commission finds that the proposed rule change is consistent with Rules 17Ad-22(e)(4)(vii), (e)(6)(vii), and (e)(7)(vii).<sup>40</sup>

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<sup>38</sup> 17 CFR 240.17Ad-22(e)(7)(vii).

<sup>39</sup> 17 CFR 240.17Ad-22(e)(4)(vii), (e)(6)(vii), and (e)(7)(vii).

<sup>40</sup> 17 CFR 240.17Ad-22(e)(4)(vii), (e)(6)(vii), and (e)(7)(vii).

#### IV. Conclusion

On the basis of the foregoing, the Commission finds that the proposed rule change is consistent with the requirements of the Act, and in particular, with the requirements of Section 17A(b)(3)(F) of the Act<sup>41</sup> and Rules 17Ad-22(e)(2)(i) and (v), (e)(3), (e)(4)(vii), (e)(6)(vii), and (e)(7)(vii) thereunder.<sup>42</sup>

IT IS THEREFORE ORDERED pursuant to Section 19(b)(2) of the Act<sup>43</sup> that the proposed rule change, as modified by Amendment No. 1 (SR-ICEEU-2018-024), be, and hereby is, approved.<sup>44</sup>

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>45</sup>

**Eduardo A. Aleman,**

*Deputy Secretary.*

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<sup>41</sup> 15 U.S.C. 78q-1(b)(3)(F).

<sup>42</sup> 17 CFR 240.17Ad-22(e)(2)(i) and (v), (e)(3), (e)(4)(vii), (e)(6)(vii), and (e)(7)(vii).

<sup>43</sup> 15 U.S.C. 78s(b)(2).

<sup>44</sup> In approving the proposed rule change, the Commission considered the proposal's impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

<sup>45</sup> 17 CFR 200.30-3(a)(12).

