

SECURITIES AND EXCHANGE COMMISSION
(Release No. 34-86554; File No. SR-DTC-2019-005)

August 2, 2019

Self-Regulatory Organizations; The Depository Trust Company; Notice of Filing of Proposed Rule Change to Amend the Settlement Guide to Implement a New Algorithm for Transactions Processed in the Night Cycle

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”)¹ and Rule 19b-4 thereunder,² notice is hereby given that on July 22, 2019, The Depository Trust Company (“DTC”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change as described in Items I, II and III below, which Items have been prepared by the clearing agency. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Clearing Agency’s Statement of the Terms of Substance of the Proposed Rule Change

The proposed rule change³ of DTC consists of amendments to the Procedures⁴ set forth in the Settlement Guide⁵ to implement a new processing algorithm for book-entry

¹ 15 U.S.C. 78s(b)(1).

² 17 CFR 240.19b-4.

³ Capitalized terms not defined herein are defined in the Rules, By-Laws and Organization Certificate of DTC (“Rules”), available at www.dtcc.com/~media/Files/Downloads/legal/rules/dtc_rules.pdf, and the DTC Settlement Service Guide (“Settlement Guide”), available at <http://www.dtcc.com/~media/Files/Downloads/legal/service-guides/Settlement.pdf>.

⁴ Pursuant to the Rules, the term “Procedures” means the Procedures, service guides, and regulations of DTC adopted pursuant to Rule 27, as amended from time to time. See Rule 1, Section 1, supra note 3. Pursuant to Rule 27, each Participant and DTC is bound by the Procedures and any amendment thereto in the same manner as it is bound by the Rules. See Rule 27, supra note 3.

⁵ Supra note 3.

Deliveries⁶ and Payment Orders⁷ processed in the DTC night cycle (“Night Cycle”), as described in greater detail below.

II. Clearing Agency’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the clearing agency included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The clearing agency has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

(A) Clearing Agency’s Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The purpose of this proposed rule change is to amend the Settlement Guide to implement a new processing algorithm for Deliveries and Payment Orders processed in the Night Cycle.

(i) **BACKGROUND**

Pursuant to the proposed rule change, DTC is proposing to make enhancements to its processing of transactions in the Night Cycle (“Night Cycle Reengineering”), as more

⁶ Pursuant to Rule 1, the term “Delivery” as used with respect to a Security held in the form of a Security Entitlement on the books of DTC, means debiting the Security from an Account of the Deliverer and crediting the Security to an Account of the Receiver. Supra note 3.

⁷ Pursuant to the Settlement Guide, “Payment Order” means a transaction in which a Participant charges another Participant for changes in value for outstanding stock loans or option contract premiums. See Settlement Guide, supra note 3, at 5.

fully described below. Night Cycle Reengineering is designed to maximize transaction throughput by optimizing available positions and controlling the order in which transactions are attempted for settlement within existing Night Cycle timeframes. The reengineered Night Cycle would introduce a new, advanced settlement processing algorithm capable of evaluating each Participant's transaction obligations, available positions, transaction priorities and risk management controls, including Net Debit Cap and Collateral Monitor,⁸ to identify the transaction processing order that maximizes Night Cycle settlement rates. DTC believes that the proposed rule change would facilitate more efficient processing of Deliveries and Payment Orders in the Night Cycle and increase the percentage of transactions that have been processed for settlement prior to the start of regular daytime processing.

DTC Transaction Processing

When a Deliver Order⁹ or Payment Order has been submitted to DTC for processing, the transaction must be approved by the Receiver through the Receiver

⁸ In managing its credit risk, DTC uses the Collateral Monitor and Net Debit Cap. These two controls work together to protect the DTC settlement system in the event of Participant default. The Collateral Monitor requires net debit settlement obligations, as they accrue intraday, to be fully collateralized; the Net Debit Cap limits the amount of any Participant's net debit settlement obligation to an amount that can be satisfied with DTC liquidity resources (the Participants Fund and the committed line of credit from a consortium of lenders). See Settlement Guide, supra note 3, at 64-67.

⁹ Pursuant to the Settlement Guide, "Deliver Order" is the term used to define a book-entry movement of shares of a particular Security between two DTC Participants. See Settlement Guide, supra note 3, at 4. DTC acts in accordance with duly authorized instructions from a Participant to effect transfers by a Participant of its Deposited Securities to another Participant or Participants. See Rule 6, supra note 3. Any Participant making a Delivery Versus Payment of Securities through the facilities of DTC shall provide DTC with an instruction specifying the amount of the payment therefor in accordance with the Procedures. After receipt of such instruction, DTC is authorized to, and shall (subject to the

Authorized Delivery function (“RAD”), before it will be staged for DTC settlement processing in accordance with the Rules and the Settlement Guide.¹⁰ After a Receiver approves a Delivery or Payment Order using RAD, DTC checks risk controls, including the Net Debit Cap and Collateral Monitor of the Participants to the transaction.¹¹ DTC also checks whether or not the Participant that would make the Delivery has a sufficient position in the subject Securities available in the Participant’s Account.¹² If a transaction satisfies DTC risk controls, namely the Net Debit Cap and Collateral Monitor, and the Delivering Participant has sufficient position in the applicable Securities, then the transaction will be processed by DTC and will become complete if the Receiver satisfies its end-of-day funds settlement obligation.¹³ If a transaction is not processed, i.e., because DTC risk controls are not met, or if the Deliverer has insufficient position in the applicable Securities, this would result in an Exception such that the transaction will pend in DTC’s system and recycle until the condition causing the pend is satisfied.¹⁴

right of DTC to cease to act for a Participant pursuant to the Rules and the Procedures), credit the Account of the Deliverer with the amount specified and debit the Account of the Receiver with the same amount. See Rule 9(A), Section 1, supra note 3.

¹⁰ RAD allows Participants to review and either approve or reject incoming Deliveries before they are processed. See Settlement Guide, supra note 3, at 53. RAD limits a Participant’s exposure from misdirected or erroneously entered transactions. See Settlement Guide, supra note 3, at 5.

¹¹ See Settlement Guide, supra note 3, at 64-68.

¹² See Settlement Guide, supra note 3, at 55.

¹³ See Rules 9(A) and 9(B), supra note 3.

¹⁴ See Settlement Guide, supra note 3, at 55.

An incomplete transaction recycles in DTC's system until the end of the day, and if it remains incomplete at the end of the day it will not be processed, will be removed from processing and will not settle.¹⁵ If the Participants to the transaction wish to settle the transaction through DTC, it will need to be resubmitted.

DTC currently processes transactions in real-time from approximately 8:30 p.m. Eastern Time ("ET") on the night before settlement day until 3:30 p.m. ET on settlement day for valued transactions and until 6:35 p.m. ET for free transactions.¹⁶ The Night Cycle starts at approximately 8:30 p.m. ET on the Business Day prior to settlement date and runs until approximately 10:00 p.m. ET each Business Day. Transactions that cannot satisfy DTC's controls at the time they are introduced to DTC will recycle throughout the day and be continuously reattempted until approximately 3:10 p.m. for valued transactions, and 6:35 p.m. for free transactions.¹⁷ Transactions that satisfy DTC's

¹⁵ Id.

¹⁶ Valued transactions are processed as Deliveries Versus Payment, as defined in Rule 1, supra note 3, with the related payments settled through end-of-day settlement. Free transactions do not have an associated payment. Processing of valued transactions must be completed earlier on settlement date than free transactions so that DTC can settle the related payments of funds in accordance with established timeframes for the DTC end-of-day settlement process as set forth in the Settlement Guide. See Settlement Guide, supra note 3, at 17-20. In accordance with the Settlement Processing Schedule, valued transactions must be approved in RAD by the Receiver by 3:30 p.m. ET. Any valued transactions not approved by the Receiver by this time are removed from the system. See Settlement Guide, supra note 3, at 24-27.

¹⁷ Certain Participants manage their securities inventory by controlling when securities transactions are submitted to DTC for processing, i.e., they may hold off submitting outgoing transactions (deliveries) until incoming transactions (receives) are processed. The window between 3:10 p.m. ET and 3:30 p.m. ET provides such Participants with an opportunity to react to receive transactions and submit applicable delivery transactions. The cutoff for all valued transactions is 3:30 p.m. ET, which allows DTC to calculate final settlement balances and complete end of day funds settlement. Free transactions are allowed to recycle

controls are processed immediately as described above. The end-of-day settlement process for valued transactions typically concludes between approximately 4:00 p.m. and 4:30 p.m.¹⁸

Proposed Night Cycle Reengineering Processing Rules

Other than a limited look-ahead process as described below, DTC does not employ a processing mechanism that is designed to proactively optimize the percentage of available transactions that are processed for settlement on settlement date. As described below, DTC proposes to implement a process that would facilitate a higher percentage of available transactions being processed for settlement during the Night Cycle.¹⁹

Pursuant to the proposed rule change, DTC would introduce an algorithm that would test multiple scenarios that would incorporate all transactions available for processing at the start of the Night Cycle as a single batch (“Night Batch Process”), to determine the order of processing of those transactions that allows for the optimal percentage of the transactions to satisfy risk and position controls (i.e., the Collateral Monitor and Net Debit Cap controls), and therefore be processed for settlement in the Night Cycle. Consistent with DTC’s existing processing environment, the scenarios used

until 6:35 p.m. ET since many free transactions are blocked intraday by the Collateral Monitor until end of day funds settlement is complete and the Collateral Monitor controls are “released.” See Settlement Guide, supra note 3, at 24-27.

¹⁸ See Settlement Guide, supra note 3, at 17-20.

¹⁹ Approximately 50 percent of transactions available for processing at the start of the Night Cycle are processed for settlement during the Night Cycle. DTC anticipates that the proposal would increase the percentage of transactions processed for settlement during the Night Cycle to approximately 65 percent.

would only involve processing of the transactions on a bilateral basis (i.e., no netting of Deliveries).²⁰ Once the optimal order of processing has been identified, the results reflecting this optimal processing order would be incorporated into DTC's core processing environment on a transaction-by-transaction basis, and member output would be produced using existing DTC output facilities. Delivery instructions provided to DTC after the Night Batch Process has begun would be submitted for daytime processing.

Inventory Management System Submission Order

Participants can use a profile in the Inventory Management System ("IMS") that allows them to define the order in which their transactions get submitted for processing during the Night Cycle.²¹

Specifically, IMS provides Participants with two (2) different types of transaction ordering: submission ordering and recycle ordering. The submission ordering allows Participants to control the order in which different transaction types are submitted into DTC's core processing system. The submission order functionality allows Participants to prioritize transactions by transaction types. The recycle ordering allows Participants to control how DTC attempts to process recycling, or pending, transactions. Similar to the submission ordering, Participants can also prioritize transactions by transaction types under recycle ordering. Additionally, Participants can instruct DTC to (i) attempt

²⁰ The proposed rule change relates only to the processing order of Deliveries and does not impact DTC's funds settlement process, by which associated funds debits and credits in the Participant's settlement account are netted intraday to calculate, at any time, a net debit balance or net credit balance, resulting in an end-of-day settlement obligation or right to receive payment.

²¹ See Securities Exchange Act Release No. 52450 (September 15, 2005), 70 FR 55641 (September 22, 2005) (File No. SR-DTC-2005-07) and Securities Exchange Act Release No. 50944 (December 29, 2004), 70 FR 1927 (January 11, 2005) (File No. SR-DTC-2004-10).

transactions in the defined order but complete any transaction that can be completed, (ii) only complete transactions in the defined order, or (iii) not complete any transactions until instructed to do so.

Because the proposed Night Batch Process would attempt to maximize settlement regardless of transaction type, the IMS profile would become obsolete with respect to transactions processed in the Night Cycle.

Look-Ahead Processing

Pursuant to the Settlement Guide, DTC's look-ahead process ("Look-Ahead Process") runs throughout the processing day at fifteen-minute intervals and selects pairs of transactions that when processed simultaneously will not violate the involved Participants' Net Debit Cap, Collateral Monitor and other risk management system controls.²²

The Look-Ahead Process reduces transaction blockage for Securities by identifying a receive transaction pending due to a Net Debit Cap insufficiency, and determines whether the processing of an offsetting delivery transaction pending because of a quantity deficiency in the same Security would permit both transactions to be completed in compliance with DTC's risk management system controls.²³ DTC's processing system calculates the net effect to the Collateral Monitor and Net Debit Cap controls for all three Participants involved and if the net effect will not result in a deficit

²² See Settlement Guide, supra note 3, at 43.

²³ Id.

in the Collateral Monitor or Net Debit Cap for any of the three Participants, the system processes the transactions simultaneously.²⁴

Pursuant to the proposed rule change, because the Night Batch Process would provide an algorithm to maximize settlement for all transactions processed in the Night Cycle, the Look-Ahead Process would become obsolete for Night Cycle processing and would not be utilized for processing of transactions in the Night Batch Process.

(ii) PROPOSED RULE CHANGES

Pursuant to the proposed rule change, DTC would add a section to the Settlement Guide titled “Batch Processing” that would set forth the following text:

During the Night Batch Process, DTC evaluates each Participant’s available positions, transaction priority and risk management controls and identifies the transaction processing order that optimizes the number of transactions processed for settlement. The Night Batch Process allows DTC to run multiple processing scenarios until it identifies an optimal processing scenario.

At approximately 8:30 p.m. on S-1, DTC will subject all transactions eligible for processing to the Night Batch Process. The Night Batch Process will be run in an “off-line” batch that will not be visible to Participants, allowing DTC to run multiple processing scenarios until the optimal processing scenario is identified. Once the optimal scenario is identified, the results of the Night Batch Process will be incorporated back into DTC’s core processing environment on a

²⁴

Id.

transaction-by-transaction basis, and Participant output will be produced using existing DTC output facilities.

In addition, the proposed rule change would add a definition for the Night Batch Process to the Settlement Guide to state that it is a process that operates to control the order of processing of transactions in the Night Cycle.

The proposed rule change would also add a sentence to the section of the Settlement Guide describing the Look-Ahead Process to state that the Look-Ahead Process would not be utilized during the Night Batch Process.

As described above, the IMS profile that allows Participants to define the order in which their transactions get submitted for settlement during the Night Cycle would become obsolete. DTC's Procedures relating to the implementation of rule changes relating to this profile were set forth in two DTC Important Notices²⁵ ("IMS Important Notices") that were included in the applicable rule filings cited above,²⁶ and these Procedures were not added to the text of any other DTC Rule or Procedure, including the Rules and Settlement Guide. Therefore, no amendment to the text of the Rules or a service guide is proposed with respect to the proposed rule change relating to this IMS profile. DTC would describe the proposed change relating to IMS in an Important Notice issued at the time of implementation of the proposed rule change with a citation to the two IMS Important Notices, cited above.

²⁵ See DTC Important Notice No. B#6329 (September 7, 2004) and DTC Important Notice No. B#7594 (April 25, 2005).

²⁶ See supra note 21.

(iii) PARTICIPANT OUTREACH

Beginning in March 2018, DTC has conducted ongoing outreach with Participants to provide them with notice of the proposed changes. As of the date of this filing, no written comments relating to the proposed changes have been received in response to this outreach. The Commission will be notified of any written comments received.

(iv) IMPLEMENTATION TIMEFRAME

Pending Commission approval, DTC expects to implement this proposal by September 26, 2019 and would announce the effective date of the proposed change by an Important Notice posted to its website. As proposed, a legend would be added to the Settlement Guide stating there are changes that have been approved by the Commission but have not yet been implemented. The proposed legend also would include a date by which such changes would be implemented and the file number of this proposal, and state that, once this proposal is implemented, the legend would automatically be removed from the Settlement Guide.

2. Statutory Basis

DTC believes this proposal is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a registered clearing agency. Specifically, DTC believes this proposal is consistent with Section 17A(b)(3)(F) of the Act²⁷ for the reasons described below.

Section 17A(b)(3)(F) of the Act requires, in part, that the Rules be designed to promote the prompt and accurate clearance and settlement of Securities transactions.²⁸

²⁷ 15 U.S.C. 78q-1(b)(3)(F).

²⁸ Id.

DTC believes that the proposed changes to implement the Night Batch Process, which would test the entire batch of transactions available for processing at the start of the Night Batch Process to determine the optimal order to process transactions in the Night Cycle, such that they may satisfy risk and position controls, would help maximize the number of transactions processed for settlement during the Night Cycle. Therefore, DTC believes that the proposed changes to implement the Night Batch Process would promote the prompt and accurate clearance and settlement of Securities transactions, consistent with Section 17A(b)(3)(F) of the Act.

(B) Clearing Agency's Statement on Burden on Competition

DTC believes the proposed changes could burden competition. This is because by implementing the Night Batch Process, Participants would no longer be able to use IMS to direct the prioritization of the processing of their transactions in the Night Cycle. DTC does not believe any burden on competition presented by the proposal would be significant, because the benefit that would be realized from the processing of a higher percentage of transactions during the Night Cycle through the optimized process described above would offset the burden of a Participant not being able to determine the order of processing on its own, and therefore render as insignificant any residual burden of a Participant no longer being able to use IMS to direct prioritization of transactions.

DTC believes any burden on competition that is created by these proposed changes would be necessary and appropriate in furtherance of the purposes of the Act, as permitted by Section 17A(b)(3)(I) of the Act.²⁹

²⁹ 15 U.S.C. 78q-1(b)(3)(I).

The proposed changes to implement the Night Batch Process would be necessary in furtherance of the purposes of the Act because the Rules must be designed to promote the prompt and accurate clearance and settlement of Securities transactions.³⁰ As described above, DTC believes that the proposed changes would promote the prompt and accurate clearance and settlement of Securities transactions by maximizing the number of settled transactions during the Night Cycle. As such, DTC believes these proposed changes would be necessary in furtherance of the purposes of the Act, as permitted by Section 17A(b)(3)(I) of the Act.³¹

DTC believes any burden on competition that is created by the proposed changes to implement the Night Batch Process would also be appropriate in furtherance of the purposes of the Act. The proposed changes would enable DTC to optimize the available Securities positions and their settlement order. Having the ability to optimize the available Securities positions and their settlement order would help DTC to maximize the number of settled transactions during the Night Cycle. As such, DTC believes these proposed changes would be appropriate in furtherance of the purposes of the Act, as permitted by Section 17A(b)(3)(I) of the Act.³²

(C) Clearing Agency's Statement on Comments on the Proposed Rule Change Received from Members, Participants, or Others

Written comments relating to this proposed rule change have not been solicited or received. DTC will notify the Commission of any written comments received by DTC.

³⁰ 15 U.S.C. 78q-1(b)(3)(F).

³¹ 15 U.S.C. 78q-1(b)(3)(I).

³² Id.

III. Date of Effectiveness of the Proposed Rule Change, and Timing for Commission Action

Within 45 days of the date of publication of this notice in the Federal Register or within such longer period up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

- (A) by order approve or disapprove such proposed rule change, or
- (B) institute proceedings to determine whether the proposed rule change

should be disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to rule-comments@sec.gov. Please include File Number SR-DTC-2019-005 on the subject line.

Paper Comments:

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549.

All submissions should refer to File Number SR-DTC-2019-005. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The

Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of DTC and on DTCC's website (<http://dtcc.com/legal/sec-rule-filings.aspx>). All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR-DTC-2019-005 and should be submitted on or before [insert date 21 days from publication in the Federal Register].

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.³³

Jill M. Peterson
Assistant Secretary

³³ 17 CFR 200.30-3(a)(12).