Required fields are shown with yellow backgrounds and asterisks.

Page 1 of * 35	SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549 Form 19b-4	File No.* SR - 2019 - * 005
		Amendment No. (req. for Amendments *)

Filing by   The Depository Trust Company

Pursuant to Rule 19b-4 under the Securities Exchange Act of 1934

Initial * ☑	Amendment * ☐	Withdrawal ☐	Section 19(b)(2) * ☑	Section 19(b)(3)(A) * ☐	Section 19(b)(3)(B) * ☐

Rule

Pilot ☐	Extension of Time Period for Commission Action * ☐	Date Expires *		19b-4(f)(1) ▣ 19b-4(f)(4) ▣ 19b-4(f)(2) ▣ 19b-4(f)(5) ▣ 19b-4(f)(3) ▣ 19b-4(f)(6) ▣

Notice of proposed change pursuant to the Payment, Clearing, and Settlement Act of 2010	Security-Based Swap Submission pursuant to the Securities Exchange Act of 1934
Section 806(e)(1) * ☐ Section 806(e)(2) * ☐	Section 3C(b)(2) * ☐

Exhibit 2 Sent As Paper Document ▣   Exhibit 3 Sent As Paper Document ▣

Description

Provide a brief description of the action (limit 250 characters, required when Initial is checked *).

Amend the Settlement Guide to Implement a New Algorithm for Transactions Processed in the Night Cycle

Contact Information

Provide the name, telephone number, and e-mail address of the person on the staff of the self-regulatory organization prepared to respond to questions and comments on the action.

First Name *	John	Last Name *	Petrofsky
Title *	Director and Assistant General Counsel		
E-mail *	jpetrofsky@dtcc.com		
Telephone *	(813) 470-2115	Fax	

Signature

Pursuant to the requirements of the Securities Exchange Act of 1934,

has duly caused this filing to be signed on its behalf by the undersigned thereunto duly authorized.

(Title *)

Date	07/22/2019	Managing Director and Deputy General Counsel
By	Lois J. Radisch	
	(Name *)	

NOTE: Clicking the button at right will digitally sign and lock this form. A digital signature is as legally binding as a physical signature, and once signed, this form cannot be changed.

lradisch@dtcc.com

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

For complete Form 19b-4 instructions please refer to the EFFS website.

Form 19b-4 Information *

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The self-regulatory organization must provide all required information, presented in a clear and comprehensible manner, to enable the public to provide meaningful comment on the proposal and for the Commission to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act.

Exhibit 1 - Notice of Proposed Rule Change *

Add   Remove   View

The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

Exhibit 1A- Notice of Proposed Rule Change, Security-Based Swap Submission, or Advance Notice by Clearing Agencies *

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The Notice section of this Form 19b-4 must comply with the guidelines for publication in the Federal Register as well as any requirements for electronic filing as published by the Commission (if applicable). The Office of the Federal Register (OFR) offers guidance on Federal Register publication requirements in the Federal Register Document Drafting Handbook, October 1998 Revision. For example, all references to the federal securities laws must include the corresponding cite to the United States Code in a footnote. All references to SEC rules must include the corresponding cite to the Code of Federal Regulations in a footnote. All references to Securities Exchange Act Releases must include the release number, release date, Federal Register cite, Federal Register date, and corresponding file number (e.g., SR-[SRO]-xx-xx). A material failure to comply with these guidelines will result in the proposed rule change, security-based swap submission, or advance notice being deemed not properly filed. See also Rule 0-3 under the Act (17 CFR 240.0-3)

Exhibit 2 - Notices, Written Comments, Transcripts, Other Communications

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Exhibit Sent As Paper Document
☐

Copies of notices, written comments, transcripts, other communications. If such documents cannot be filed electronically in accordance with Instruction F, they shall be filed in accordance with Instruction G.

Exhibit 3 - Form, Report, or Questionnaire

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Exhibit Sent As Paper Document
☐

Copies of any form, report, or questionnaire that the self-regulatory organization proposes to use to help implement or operate the proposed rule change, or that is referred to by the proposed rule change.

Exhibit 4 - Marked Copies

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The full text shall be marked, in any convenient manner, to indicate additions to and deletions from the immediately preceding filing. The purpose of Exhibit 4 is to permit the staff to identify immediately the changes made from the text of the rule with which it has been working.

Exhibit 5 - Proposed Rule Text

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The self-regulatory organization may choose to attach as Exhibit 5 proposed changes to rule text in place of providing it in Item I and which may otherwise be more easily readable if provided separately from Form 19b-4. Exhibit 5 shall be considered part of the proposed rule change.

Partial Amendment

Add   Remove   View

If the self-regulatory organization is amending only part of the text of a lengthy proposed rule change, it may, with the Commission's permission, file only those portions of the text of the proposed rule change in which changes are being made if the filing (i.e. partial amendment) is clearly understandable on its face. Such partial amendment shall be clearly identified and marked to show deletions and additions.

1.   Text of Proposed Rule Change

(a)   The proposed rule change of The Depository Trust Company ("DTC") is attached hereto as Exhibit 5.[1] The proposed rule change would amend the Procedures[2] set forth in the Settlement Guide[3] to implement a new processing algorithm for book-entry Deliveries[4] and Payment Orders[5] processed in the DTC night cycle ("Night Cycle"), as described in greater detail below.

(b)   Not applicable.

(c)   Not applicable.

2.   Procedures of the Self-Regulatory Organization

The proposed rule change was approved by the Businesses, Technology and Operations Committee of DTC's Board of Directors on June 11, 2019.

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[1]   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.

[2]   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 1. 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 1.

[3]   Supra note 1.

[4]   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 1.

[5]   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 1, at 5.

3.   Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

(a)   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 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,[6] 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 Order[7] or Payment Order has been submitted to DTC for processing, the transaction must be approved by the Receiver through the Receiver Authorized Delivery function

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[6]   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 1, at 64-67.

[7]   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 1, 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 1. 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 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

("RAD"), before it will be staged for DTC settlement processing in accordance with the Rules and the Settlement Guide.[8] 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.[9] 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.[10] 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.[11] 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.[12]

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.[13] 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.[14] The Night Cycle starts at

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and debit the Account of the Receiver with the same amount. See Rule 9(A), Section 1, supra note 1.

[8]   RAD allows Participants to review and either approve or reject incoming Deliveries before they are processed. See Settlement Guide, supra note 1, at 53. RAD limits a Participant's exposure from misdirected or erroneously entered transactions. See Settlement Guide, supra note 1, at 5.

[9]   See Settlement Guide, supra note 1, at 64-68.

[10]   See Settlement Guide, supra note 1, at 55.

[11]   See Rules 9(A) and 9(B), supra note 1.

[12]   See Settlement Guide, supra note 1, at 55.

[13]   Id.

[14]   Valued transactions are processed as Deliveries Versus Payment, as defined in Rule 1, supra note 1, 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 1, at 17-20. In accordance with the Settlement Processing Schedule, valued

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.[15] Transactions that satisfy DTC's 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.[16]

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.[17]

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 would only involve processing of the transactions on a bilateral

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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 1, at 24-27.

[15]   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 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 1, at 24-27.

[16]   See Settlement Guide, supra note 1, at 17-20.

[17]   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.

basis (i.e., no netting of Deliveries).[18] 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.[19]

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 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.[20]

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[18] 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.

[19] 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).

[20] See Settlement Guide, supra note 1, at 43.

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.[21] 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 in the Collateral Monitor or Net Debit Cap for any of the three Participants, the system processes the transactions simultaneously.[22]

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 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.

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21   Id.

22   Id.

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 Notices[23] ("IMS Important Notices") that were included in the applicable rule filings cited above,[24] 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.

(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 Securities and Exchange Commission ("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.

(b) Statutory Basis

DTC believes this proposal is consistent with the requirements of the Securities Exchange Act of 1934 (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 Act[25] 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.[26] DTC believes that

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

[24]   See supra note 19.

[25]   15 U.S.C. 78q-1(b)(3)(F).

[26]   Id.

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.

4.   Self-Regulatory Organization'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.[27]

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.[28] 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.[29]

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

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[27]   15 U.S.C. 78q-1(b)(3)(I).

[28]   15 U.S.C. 78q-1(b)(3)(F).

[29]   15 U.S.C. 78q-1(b)(3)(I).

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.[30]

5.   Self-Regulatory Organization'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.

6.   Extension of Time Period for Commission Action

DTC does not consent to an extension of the time period specified in Section 19(b)(2) of the Act[31] for Commission action.

7.   Basis for Summary Effectiveness Pursuant to Section 19(b)(3) or for Accelerated Effectiveness Pursuant to Section 19(b)(2)

(a)   Not applicable.

(b)   Not applicable.

(c)   Not applicable.

(d)   Not applicable.

8.   Proposed Rule Change Based on Rules of Another Self-Regulatory Organization or of the Commission

Not applicable.

9.   Security-Based Swap Submissions Filed Pursuant to Section 3C of the Act

Not applicable.

10.   Advance Notices Filed Pursuant to Section 806(e) of the Payment, Clearing, and Settlement Supervision Act of 2010

Not applicable.

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[30]   Id.

[31]   15 U.S.C. 78s(b)(2).

11. **Exhibits**

Exhibit 1 – Not applicable.

Exhibit 1A – Notice of proposed rule change for publication in the <u>Federal Register</u>.

Exhibit 2 – Not applicable.

Exhibit 3 – Not applicable.

Exhibit 4 – Not applicable.

Exhibit 5 – Proposed changes to the Rules.

EXHIBIT 1A

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

[DATE]

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 __, 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 change[3] of DTC consists of amendments to the Procedures[4] set

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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.

forth in the Settlement Guide[5] to implement a new processing algorithm for book-entry

Deliveries[6] and Payment Orders[7] 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.

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[5]   Supra note 3.

[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.

(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

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 Order[9] or Payment Order has been submitted to DTC for

processing, the transaction must be approved by the Receiver through the Receiver

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[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

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

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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 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.

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]

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

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

[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

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

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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 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.

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

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

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[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).

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 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

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

[23]   Id.

controls for all three Participants involved and if the net effect will not result in a deficit

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 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.

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[24]   Id.

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 Notices[25] ("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.

(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.

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[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.

(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 Act[27] 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] 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

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[27]   15 U.S.C. 78q-1(b)(3)(F).

[28]   Id.

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]

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

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[29]   15 U.S.C. 78q-1(b)(3)(I).

[30]   15 U.S.C. 78q-1(b)(3)(F).

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.

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:

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[31]   15 U.S.C. 78q-1(b)(3)(I).

[32]   Id.

(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]

              Secretary

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[33]   17 CFR 200.30-3(a)(12).

EXHIBIT 5

Bold, underlined text indicates proposed additions.

~~**Bold, strikethrough**~~ text indicates proposed deletions.

The Depository Trust Company

Settlement Service Guide

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[Changes to these Procedures, as amended by File No. SR-DTC-2019-005, are available at dtcc.com/~/media/Files/Downloads/legal/rule-filings/2019/DTC/SR-DTC-2019-005.pdf. These changes have been approved by the Securities and Exchange Commission but have not yet been implemented. By September 26, 2019, these changes will be implemented and this legend will automatically be removed from these Procedures.]

About Settlement

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Important Terms

The following terms are important to understanding the Settlement Service:

This term	Refers to
Aggregate Affiliated Family Net Debit Cap	A limit to the settlement debit an Affiliated Family can incur at any point during the processing day.
chill	A systemic way DTC can prohibit a Participant from processing certain activities (for example, valued delivery chill will prevent the Participant from making valued deliveries from its account).
Collateral Monitor (CM)	DTC's process for measuring the sufficiency of the collateral in a Participant's account to cover its net settlement obligation.
collateral value	The market value of a security less the applicable DTC haircut.
Computer-to-Computer Facility (CCF/CCF II)	A batch transmission system for input/output based on various protocols between a Participant's mainframe and DTC's mainframe.

This term	Refers to
Continuous Net Settlement (CNS)	The system employed by NSCC to settle NYSE, AMEX, NASDAQ, and over-the-counter trades.
deliver order (DO)	The term used to define a book-entry movement of shares of a particular security between two DTC Participants.
drop	A transaction that does not complete because of insufficient position, Risk Management Controls, and so forth.
haircut	The percentage decrease of a security's market value in determining the collateral value of the security.
initial distribution	The delivery of shares of a new issue from the lead manager and syndicate members to their customers. Shares are considered initial distribution shares until they are sold on the secondary market.
long allocations	Deliveries from NSCC's Omnibus Account 888 to a Participant's DTC account as a result of Continuous Net Settlement processing.
market value	The prior day's closing price of a security for security valuation purposes.
memo segregation	An inventory control mechanism that allows a Participant to protect fully-paid-for securities in its general free or IPO control account.
Message Queuing (MQ)	A system for messaging across multiple platforms. Developed as part of IBM's WebSphere family, it is also referred to as "WebSphere MQ" or "MQ Series."
Minimum Amount (MA)	DTC's classification for securities in a Participant's account that are not considered collateral.
Money Market Instrument (MMI)	Debt securities such as commercial paper or medium-term notes that are eligible for DTC's MMI Program.
Net Additions (NA)	DTC's classification for securities in a Participant's account that are considered collateral.
net debit cap	A limit to the settlement net debit a Participant can incur at any point during the processing day.
Night Batch Process	**A process that operates to control the order of processing of transactions in the night cycle.**
night deliver order (NDO)	A DO input on the day prior to settlement. A reduced rate is charged for NDO transactions.
payment order (PO)	A transaction in which a Participant charges another Participant for changes in value for outstanding stock loans or option contract premiums.
Receiver Authorized Delivery (RAD)	A control mechanism that allows a Participant to review transactions prior to completion of processing. It limits the Participant's exposure from misdirected or erroneously entered DOs, POs, institutional delivery transactions, MMI transactions, reclaims, pledges and releases of pledged securities.

This term	Refers to
reclamation or reclaim	The return of a DO, PO, institutional delivery transaction or MMI transaction received by a Participant. All reclaims are considered original transactions for purposes of DTC processing and are subject to Risk Management Controls and RAD.
Risk Management Controls	The controls, primarily net debit cap and CM, that are used to provide protection to all DTC Participants against the inability of one or more Participants to settle net settlement obligations.
Settlement progress payments (SPP)	An intraday funds transfer sent via Fedwire to a Participant's DTC Participant account.
Settlement User Interface	Any system or combination of systems that allows for input/inquiry into the DTC Settlement System.
short covers	Deliveries to NSCC's Omnibus Account 888 as a result of CNS.
syndicate	A group of broker-dealers that agree to purchase a new issue of securities from the issuer for resale to the investment public.
Unknown Rate	For variable rate MMI Securities, the interest rate that the IPA will pay for the income portion of a presentment.
unvalued additions	Unvalued additions to a Participant's security account that do not carry a related payment obligation with the receipt of securities. They include: • Deposits • Free release of pledged securities • Receipt of a free DO • Releases of segregated securities

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Look-Ahead Processing

DTC's Look-Ahead process runs on fifteen minute intervals and selects pairs of transactions that when processed simultaneously will not violate the involved Participants net debit cap, collateral or other Risk Management system controls.

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 an offsetting delivery transaction pending because of a quantity deficiency in the same security would permit both 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. DTC's processing system, Account Transaction Processor (ATP) calculates the net effect to the collateral and net debit cap controls for all three Participants involved and if the net effect will not result in a deficit in the collateral or net debit cap for any of the three Participants, ATP processes the transactions simultaneously.

DTC's Look-Ahead process also allows Money Market Issuance Deliveries pending for a Custodian's or Dealer's net debit cap to complete against Maturity Presentments pending for an Issuing/Paying Agent's net debit cap. The processing system calculates the net effect of the dollar amount of offsetting transactions in the accounts of the two Participants involved. If the net of the transactions results in positive risk management controls in those two accounts, the transactions will be completed..

Note: The Look-Ahead process is not utilized during the Night Batch Process.

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Risk Management Controls

About the Product

Risk Management Controls protect DTC and its Participants from the inability of one or more Participants to pay their settlement obligations. Risk Management Controls are based on guidelines established by the Federal Reserve Bank (FRB). DTC currently employs three primary Risk Management Controls for processing securities:

- Collateralization (Collateral Monitor)
- Net Debit Cap
- Issuer/Participant Number (IPN) Collateral Control.

Collateralization

Collateralization ensures that your account has sufficient collateral for DTC to liquidate if you fail to pay your settlement obligation and become insolvent. DTC's collateralization procedures prevent the completion of transactions that would cause your net debit to exceed the total available collateral in your account.

DTC operates on a fully collateralized basis. You are required to have sufficient collateral in your account to support net settlement debits you incur. Transactions that would cause your net debit to exceed the total value of collateral in your account are held in a recycle (pend) queue until sufficient collateral is available.

Your primary sources of collateral are:

- Cash deposited to the Participants Fund
- Proprietary or firm positions (such as dealer, investment, or margin positions) that you designate as collateral
- Securities received (and not paid for) versus payment
- Securities added to your account and not received versus payment (such as deposits, free deliveries, free pledge releases, release of segregated securities) that you designate as collateral.

Collateral Valuation of Securities

The value of securities designated as collateral is based on the prior business day's closing market price, less a haircut. Haircuts are used to protect DTC and its Participants from price fluctuations if DTC is required to liquidate collateral of an insolvent Participant. Furthermore, because DTC may have to finance a Participant's failure overnight, DTC's haircut structure takes into consideration haircuts imposed by our line-of-credit banks. The full market value of securities is not normally obtainable from a bank that accepts securities as collateral to support a loan; banks generally consider the relative price volatility of the collateral and impose a haircut on the market value of securities. Securities that are not acceptable to DTC's line-of-credit banks do not receive collateral value in our system; therefore, a 100 percent haircut is applied to these securities.

DTC employs haircuts ranging from 2 to 100 percent. Because the collateral value of securities is based on their prior day's closing market prices, these haircuts may not be sufficient in cases where prices fall dramatically intraday. DTC can reprice and modify haircuts of selected issues intraday and can systemically revalue the collateral of Participants holding these securities.

Using the Collateral Monitor to Measure Available Collateral

DTC tracks collateral in your account by a control position called the Collateral Monitor (CM). At the opening of each business day, your CM is credited with your Participants Fund deposit. At all times, the CM reflects the amount by which the collateral in your account exceeds the net debit in your settlement account. In other words, the CM equals the sum of the value of your collateral and net settlement obligation.

For example, if you have collateral securities with a market value of$10,000 and a 10 percent haircut, the value of your collateral is $9,000. If you also incurred a debit of $8,000, your CM is $1,000 {(10,000- [0.1 x 10,000] + (-$8,000)}.

Conceptually, every transaction translates into a collateral flow and a cash flow, one a credit and the other a debit. The net value of these two flows is used to update the CM. Since the value of securities as collateral is subject to a haircut on the market value, the cash component (for settlement value) of each transaction is generally greater in value than its securities component. Thus, the completion of a delivery versus payment generally results in an increase in the deliverer's CM and a decrease in the receiver's CM, based on the difference between the collateral value of the securities and the settlement value of the transaction. Transactions that do not have a cash component, such as deposits and "free" deliveries, are considered to have a zero cash component.

When processing a transaction, DTC verifies that the deliverer's and receiver's CMs will not become negative when the transaction completes. If the transaction would cause either party to have a negative CM and thereby be undercollateralized, the transaction will recycle until the deficient account has sufficient collateral to complete (see Recycle Processing).

Controlling Collateral

Securities received versus payment are automatically designated as net additions (NA) because the receiver has not yet paid for these securities. Your CM is credited the collateral value (market value minus the applicable haircut) of all positions designated NA. Conversely, your CM is not affected by positions designated as minimum amount (MA). You can manage your collateral in the following ways:

- **Opening (start-of-day) securities positions as collateral:** You can give DTC standing instructions to designate as collateral all securities in your account at the opening of each day. All start-of-day positions are then designated NA, and your CM is credited the collateral value of the start-of-day positions. Contact your Relationship Manager to change your standing instructions.
- **Unvalued additional securities:** You can give DTC standing instructions to designate all unvalued additions of securities to your account (such as deposits and free DOs received) as either NA or MA. Contact your Relationship Manager to change your standing instructions.

  Warning! Consider the implications of classifying your securities as collateral. Collateral can be used to support your debt and therefore can be liquidated by DTC if you are unable to pay your settlement obligation.

- **Intraday reclassification of securities:** You can submit instructions to DTC using the DYMA Collateral Moves (MA/NA) function to reclassify an issue as collateral or non-collateral.

  Note- A Collateral Moves instruction will not execute if the removal of the collateral from your account would cause your CM or simulated CM to become negative.

- **Settlement Progress Payments (SPPs):** You can increase your CM by wiring Settlement Progress Payments (SPPs) to DTC's account at the Federal Reserve Bank of New York (FRBNY). Your CM and your settlement account will be credited for the amount of the SPP; thus, SPPs also reduce your actual net debit. See Wire Instructions for more information.)

To view your CM balance, use the Risk Management Controls Inquiry function.

Net Debit Caps

Net Debit Caps help ensure that DTC can complete settlement, even if a Participant fails to settle. They are based on your net debit history at DTC and automatically rise or fall relative to the average of your highest intraday net debit peaks in accordance with the calculation described below (in "Calculating Your Net Debit Cap"). A Net Debit Cap, recalculated daily, is applied to your account to limit the settlement net debit you could incur at any point during a processing day.

Your Net Debit Cap is limited by DTC's established maximum Net Debit Cap, the value of which is always set lower than DTC's total available liquidity. Currently, the maximum Net Debit Cap you can have is $1.8 billion.

Before completing a transaction in which you are the receiver, DTC calculates the resulting effect the transaction would have on your account, and determines whether your resulting Net Debit Balance would exceed your Net Debit Cap. Any transaction that would cause your net settlement debit to exceed your Net Debit Cap is placed on a pending (recycling) queue until another transaction creates credits in your account (see Recycle Processing for more information). Most credits are generated when you deliver securities versus payment; pledge securities for value; receive principal, dividend or interest allocations; or wire funds (SPPs) to DTC's account at the FRBNY.

Calculation of Participant Net Debit Caps

Net Debit Caps for a Participant are calculated daily as follows:

1. The system records the Participant's collateral group's three highest intraday net debit peaks over a rolling 70-business-day period, using net debit peaks. If the Participant has elected to group its accounts into separate families (see Grouping Accounts into Collateral Families) , the system first calculates the average net debit peak of each family, and adds together the average net debit peaks of all of the Participant's families to obtain the Participant's overall average net debit peak.
2. The system multiplies the Participant's average net debit peak by a factor to determine the Participant's Net Debit Cap, which cannot exceed DTC's established maximum of$1.8 billion. (Factors are based on a sliding scale, between 1 and 2, where smaller average peaks are multiplied by larger factors and larger average peaks are multiplied by smaller factors.)

The established minimum Net Debit Cap is equal to twice the sum of *all* Participants' minimum deposits to the Fund.

Note- Your Settling Bank can set your maximum Net Debit Cap. However, the maximum amount set by a Settling Bank cannot exceed the Net Debit Cap calculated by DTC's system. DTC may also limit your Net Debit Cap to any amount regardless of your intraday net debit peaks.

Although most transactions are subject to Risk Management Controls, the following activities override collateralization and Net Debit Cap controls:

- Mutual funds purchases through DTC's Fund/SERV system
- DTC-generated activity (such as monthly billing charges)
- Deposit or settlement adjustments
- Short position charges
- Principal and income charges
- Participants Fund charges.

To view your Net Debit Cap and net settlement balance, use the Risk Management Controls Inquiry function.

As an added measure DTC has also established limits on the maximum settlement obligation that a financial family of affiliated DTC Participants can incur. An Affiliated Family means each Participant that controls or is controlled by another Participant and each Participant that is under the common control of any Person. For purposes of this definition, "control" means the direct or indirect ownership of more than 50% of the voting securities or other voting interests of any Person. The maximum "Aggregate Affiliated Family Net Debit Cap" for the Participants comprising an Affiliated Family is currently set at $2.85 billion.

So that DTC will be able to complete settlement each day in the event of a Participant's inability to settle, DTC currently maintains liquidity resources of $3.05 billion, including $1.15 billion cash in the Participants Fund and a committed line of credit in the amount of $1.9 billion with a consortium of banks.

Batch Processing

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

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