

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

**FORM S-3**  
REGISTRATION STATEMENT UNDER  
THE SECURITIES ACT OF 1933

**22nd Century Group, Inc.**  
(Exact name of registrant as specified in its charter)

**Nevada**  
(State or other jurisdiction of incorporation or organization)

**98-0468420**  
(I.R.S. Employer Identification No.)

**8560 Main Street, Suite 4**  
**Williamsville, New York 14221**  
**(716) 270-1523**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**James A. Mish**  
**Chief Executive Officer**  
**22nd Century Group, Inc.**  
**8560 Main Street, Suite 4**  
**Williamsville, New York 14221**  
**(716) 270-1523**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

With a copy to:  
**John J. Wolfel, Esq.**  
**Foley & Lardner LLP**  
**One Independent Drive, Suite 1300**  
**Jacksonville, Florida 32202**  
**(904) 359-2000**

**Approximate date of commencement of proposed sale to the public:** From time to time after this registration statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, please check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

**CALCULATION OF REGISTRATION FEE**

Title of each class of securities to be registered	Amount to Be Registered	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee

Debt Securities	(2)(3)	(3)(4)	(5)
Common Stock, \$0.00001 par value	(2)(3)	(3)(4)	(5)
Preferred Stock, \$0.00001 par value	(2)(3)	(3)(4)	(5)
Warrants	(2)(3)	(3)(4)	(5)
Subscription Rights	(2)(3)	(3)(4)	(5)
Securities Purchase Contracts	(2)(3)	(3)(4)	(5)
Units <sup>(1)</sup>	(2)(3)	(3)(4)	(5)
Common Stock issuable upon the exercise of previously issued and outstanding Warrants <sup>(6)</sup>	11,293,211	-	(6)
Total		<b>\$100,000,000<sup>(5)</sup></b>	<b>\$12,980<sup>(5)</sup></b>

- (1) Each unit consists of one or more shares of common stock, shares of preferred stock, debt securities, warrants, subscription rights, securities purchase contracts or any combination of the foregoing.
- (2) Includes an indeterminate aggregate principal amount and number of securities of each identified class of securities up to a proposed aggregate offering price of \$100.0 million, which may be offered by the registrant from time to time in unspecified numbers and at indeterminate prices, and as may be issued upon conversion, redemption, repurchase, exchange or exercise of any securities registered hereunder, including any applicable anti-dilution provisions. This registration statement also covers delayed delivery contracts that may be issued by the registrant under which the party purchasing such contracts may be required to purchase any securities that may be offered hereunder. Such contracts may be issued together with the specific securities to which they relate. Securities registered hereunder to be sold by the registrant may be sold either separately or as units comprised of more than one type of security registered hereunder. Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), the securities being registered hereunder include such indeterminate number of shares of common stock as may be issuable with respect to the securities being registered hereunder as a result of stock splits, stock dividends or similar transactions.
- (3) Pursuant to General Instruction II.D of Form S-3, the table lists each of the classes of securities being registered and the aggregate proceeds to be raised but does not specify by each class information as to the amount to be registered, proposed maximum offering price per unit, and proposed maximum aggregate offering price.
- (4) If applicable, includes consideration to be received by the registrant for registered securities that are issuable upon exercise, conversion or exchange of other registered securities or that are issued in units.
- (5) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act.
- (6) In accordance with Rule 429 under the Securities Act, the prospectus contained herein also relates to and will be used in connection with the issuance of up to an aggregate of 11,293,211 shares of common stock issuable upon the exercise of certain of the registrant's outstanding warrants, as more fully described herein. If such warrants are exercised and such shares of common stock are issued and sold before the effective date of this registration statement, such shares of common stock will not be included in the prospectus contained herein. The shares of common stock that may be issued upon the exercise of the 11,293,211 warrants issued pursuant to a Form S-3 (Registration No. 333-215391) have not yet expired with respect to such securities and have not yet been issued. Pursuant to Rule 415(a)(5)-(6), no additional filing fee is required to be paid for these shares of common stock because the issuance of these shares were previously registered on the aforementioned registration statement and the fees were paid in connection with such registration statement. Pursuant to Rule 416 under the Securities Act of 1933, as amended, these securities being registered hereunder as described in this footnote include such indeterminate number of shares of common stock as may be issuable with respect to the securities being registered hereunder as a result of stock splits, stock dividends or similar transactions.

Pursuant to Rule 429(a) under the Securities Act, the prospectus included in this registration statement is a combined prospectus relating to 11,293,211 shares of common stock underlying certain of the Registrant's outstanding warrants, as more fully described herein. Pursuant to Rule 429(b), this registration statement, upon effectiveness, also constitutes a post-effective amendment to the registrant's registration statement on Form S-3 (Registration No. 333-215391) previously filed with the Securities and Exchange Commission and declared effective on January 17, 2017 (the "Prior Registration Statement"), which post-effective amendment to the Prior Registration Statement shall hereafter become effective concurrently with the effectiveness of this registration statement and in accordance with Section 8(c) of the Securities Act of 1933.

**The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.**

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The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities nor a solicitation of an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to completion, dated July 21, 2020

PRELIMINARY PROSPECTUS



**22nd Century Group, Inc.**

**DEBT SECURITIES  
COMMON STOCK  
PREFERRED STOCK  
WARRANTS  
SUBSCRIPTION RIGHTS  
SECURITIES PURCHASE CONTRACTS  
UNITS**

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We may offer and sell from time to time up to \$100 million of any combination of the securities described in this prospectus, from time to time, in one or more offerings, in amounts, at prices and on terms determined at the times of offerings.

This prospectus describes the general manner in which our securities maybe offered using this prospectus. We will provide specific terms of the securities, including the offering prices, in one or more supplements to this prospectus. The supplements may also add, update or change information contained in this prospectus. You should read this prospectus and the prospectus supplement relating to the specific issue of securities carefully before you invest.

We may offer the securities for sale directly to the purchasers or through one or more underwriters, dealers and agents to be designated at a future date. The supplements to this prospectus will provide the specific terms of the plan of distribution.

This prospectus also relates to the issuance of 11,293,211 shares of our common stock upon exercise of certain of our outstanding warrants (as described herein the heading "Description of Capital Stock – Warrants"). Such outstanding warrants and shares of common stock were registered under our prior Registration Statement on Form S-3 (Registration No. 333-215391) as declared effective by the Securities and Exchange Commission (the "SEC") on January 17, 2017 (the "Prior Registration Statement").

Our common stock is listed on the NYSE American under the symbol "XXII." The last reported sale price of the common stock on July 20, 2020 was \$0.79 per share. Each prospectus supplement will indicate if the securities offered thereby will be listed on any securities exchange.

**Investing in our securities involves risk. Please read carefully the section entitled "Risk Factors" on Page 1 of this prospectus and any similar section contained in the applicable prospectus supplement and/or other offering material concerning factors you should consider before investing in our securities which may be offered hereby.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

The date of this prospectus is \_\_\_\_\_, 2020.

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## ABOUT THIS PROSPECTUS

Unless the context otherwise requires, references in this prospectus to “Company,” “22nd Century,” “we,” “us,” “our,” and “ours” refer to 22nd Century Group, Inc. and its subsidiaries where the context so requires.

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process. Under this shelf registration process, we may, from time to time, sell the securities described in this prospectus, in one or more offerings, up to the maximum aggregate dollar amount \$100.0 million. This prospectus provides you with a general description of the securities that we may offer. Each time we offer securities, we will provide a prospectus supplement and/or other offering material that will contain specific information about the terms of that offering. This prospectus also relates to the issuance of up to 11,293,211 shares of common stock upon exercise of certain of our outstanding warrants. The warrants and shares of common stock issuable thereunder were registered under the Prior Registration Statement. The prospectus supplement and/or other offering material may also add, update or change information contained in this prospectus. You should read this prospectus and the applicable prospectus supplement and any other offering material together with the additional information described under the heading “Where You Can Find More Information.”

You should rely only on the information contained or incorporated by reference in this prospectus and in any prospectus supplement or other offering material. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making offers to sell the securities in any jurisdiction in which an offer is not authorized or in which the person making that offer is not qualified to do so or to anyone to whom it is unlawful to make an offer. You should not assume that the information contained in this prospectus or any prospectus supplement or any other offering material, or the information we previously filed with the SEC that we incorporate by reference in this prospectus or any prospectus supplement, is accurate as of any date other than its respective date. Our business, financial condition, results of operations and prospects may have changed since those dates.

## RISK FACTORS

Investing in our securities involves risks. Before making an investment decision, you should carefully consider the risks and other information we include or incorporate by reference in this prospectus and any prospectus supplement. In particular, you should consider the risk factors described under the heading “Risk Factors” in our most recent Annual Report on Form 10-K and in Item 1A of our Quarterly Report on Form 10-Q for the period ended March 31, 2020 under the heading “Risk Factors,” as may be revised or supplemented by our subsequent Quarterly Reports on Form 10-Q or Current Reports of Form 8-K, each of which are on file with the SEC and are incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. In addition to those risk factors, there may be additional risks and uncertainties of which are not currently known to us or that we currently deem immaterial. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities. Additional risk factors may be included in a prospectus supplement relating to a particular offering of securities.

## CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

We make forward-looking statements in this registration statement and may make such statements in future filings with the Securities and Exchange Commission, or SEC. We may also make forward-looking statements in our press releases or other public or stockholder communications. Our forward-looking statements are subject to risks and uncertainties and include information about our expectations and possible or assumed future results of our operations. When we use words such as “may,” “might,” “will,” “should,” “believe,” “expect,” “anticipate,” “estimate,” “continue,” “could,” “plan,” “potential,” “predict,” “forecast,” “project,” “intend,” or similar expressions, or make statements regarding our intent, belief, or current expectations, we are making forward-looking statements.

These forward-looking statements are neither promises nor guarantees of future performance due to a variety of risks and uncertainties, many of which are beyond our control, which could cause actual results to differ materially from those indicated by these forward-looking statements, including, without limitation, risks relating to:

- The impact of the COVID-19 pandemic on our business and operations;
- Our ability to monetize our intellectual property portfolio;
- Our ability to ability to achieve profitability;
- Our ability to manage our growth effectively;

- The lack of implementation of the plan by the U.S. Food and Drug Administration (“FDA”) to regulate nicotine content in cigarettes;
- Our ability to obtain FDA authorization for our Modified Risk Tobacco Product;
- Our ability to gain market acceptance for our products;
- Our ability to prevail in litigation;
- Our ability to maintain our rights to our intellectual property; and
- other risks more fully discussed in the “Risk Factors” section in this prospectus, the section of any accompanying prospectus supplement entitled “Risk Factors” and the risk factors and cautionary statements described in other documents that we file from time to time with the SEC, specifically under “Risk Factors” and elsewhere in our most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q.

We claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995 for all of our forward-looking statements. While we believe that our forward-looking statements are reasonable, you should not place undue reliance on any such forward-looking statements, which are based on information available to us on the date of this report or, if made elsewhere, as of the date made. Because these forward-looking statements are based on estimates and assumptions that are subject to significant business, economic and competitive uncertainties, many of which are beyond our control or are subject to change, actual results could be materially different. See “Risk Factors” in this prospectus for more information. You should consider these factors and other cautionary statements made in this prospectus and in the documents we incorporate by reference as being applicable to all related forward-looking statements wherever they appear in this prospectus and in the documents incorporated by reference.

Other factors not currently anticipated may also materially and adversely affect our results of operations, cash flows and financial position. We do not undertake any obligation to update or alter any statements whether as a result of new information, future events or otherwise, except as required by law.

## OUR COMPANY

### *Overview*

We are a plant biotechnology company focused on technology that allows us to alter the level of nicotine and other nicotinic alkaloids in tobacco plants and the levels of cannabinoids in hemp/cannabis plants through genetic engineering and modern plant breeding techniques. Our mission in tobacco is to reduce the harm caused by smoking by introducing adult smokers to our proprietary, Very Low Nicotine Content tobacco and cigarette products. Our mission in hemp/cannabis is to develop proprietary varieties of hemp with valuable cannabinoid profiles and other superior agronomic traits. We have a significant intellectual property portfolio of issued patents and patent applications relating to both tobacco and hemp/cannabis plants. Our Annual Report on Form 10-K for the year ended December 31, 2019 and subsequently filed Form 10-Qs provide additional information about our business, operations and financial condition.

### *Corporate Information*

We are a Nevada corporation incorporated in September 2005 and our corporate headquarters is located at 8560 Main Street, Suite 4, Williamsville, New York 14221. Our telephone number is (716) 270-1523. Our Internet website address is [www.xxiicentury.com](http://www.xxiicentury.com). We do not incorporate the information on our website into this prospectus, and you should not consider it part of this prospectus.

#### USE OF PROCEEDS

Unless otherwise described in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities for general corporate purposes, including potentially expanding existing businesses, acquiring businesses and investing in other business opportunities. Pending such use, we may temporarily invest the net proceeds in short-term investments.

## DILUTION

We will set forth in a prospectus supplement the following information regarding any material dilution of the equity interests of investors purchasing securities in an offering under this prospectus:

- the net tangible book value per share of our equity securities before and after the offering;
- the amount of the increase in such net tangible book value per share attributable to the cash payments made by purchasers in the offering; and
- the amount of the immediate dilution from the public offering price which will be absorbed by such purchasers.

## **SECURITIES TO BE OFFERED**

We may offer, from time to time and in one or more offerings, debt securities, shares of common stock, shares of preferred stock, warrants, subscription rights, securities purchase contracts and units. Set forth herein and below is a general description of the securities that we may offer hereunder. We will set forth in the applicable prospectus supplement a specific description of the securities that may be offered under this prospectus. The terms of the offering of securities, the initial offering price and the net proceeds will be contained in the prospectus supplement and/or other offering material relating to such offering.

## DESCRIPTION OF DEBT SECURITIES

We have summarized below general terms and conditions of the debt securities that we will offer and sell pursuant to this prospectus. When we offer to sell a particular series of debt securities, we will describe the specific terms and conditions of the series in a prospectus supplement to this prospectus. We will also indicate in the applicable prospectus supplement whether the general terms and conditions described in this prospectus apply to the series of debt securities. The terms and conditions of the debt securities of a series may be different in one or more respects from the terms and conditions described below. If so, those differences will be described in the applicable prospectus supplement.

The debt securities will be our senior debt securities and will be issued under an indenture between us and a trustee, a form of which is incorporated by reference into this prospectus and attached as an exhibit to the registration statement of which this prospectus is a part. See “Where You Can Find More Information.” We refer to this indenture as the “indenture.”

The following is a summary of some provisions of the indenture. The following summary does not purport to be complete, and is subject to, and qualified in its entirety by reference to, all of the provisions of the indenture, including the definitions of specified terms used in the indenture, and the debt securities. We encourage you to read the indenture and the debt securities because they, and not this description, set forth your rights as a holder of our debt securities. We will describe the particular terms of any debt securities in the prospectus supplement relating to those debt securities. Parenthetical section references under this heading are references to sections in the indenture unless we indicate otherwise.

### General

We may offer the debt securities from time to time in as many distinct series as we may determine. The indenture does not limit the amount of debt securities that we may issue under that indenture. We may, without the consent of the holders of the debt securities of any series, issue additional debt securities ranking equally with, and otherwise similar in all respects to, the debt securities of the series (except for the public offering price and the issue date) so that those additional debt securities will be consolidated and form a single series with the debt securities of the series previously offered and sold.

The debt securities of each series will be issued in fully registered form without interest coupons. We currently anticipate that the debt securities of each series offered and sold pursuant to this prospectus will be issued as global debt securities as described under “—Book-Entry; Delivery and Form; Global Securities” and will trade in book-entry form only.

Debt securities denominated in U.S. dollars will be issued in denominations of \$2,000 and any integral multiple of \$1,000 in excess thereof, unless otherwise specified in the applicable prospectus supplement. If the debt securities of a series are denominated in a foreign or composite currency, the applicable prospectus supplement will specify the denomination or denominations in which those debt securities will be issued.

Unless otherwise specified in the applicable prospectus supplement, we will repay the debt securities of each series at 100% of their principal amount, together with any premium and accrued and unpaid interest thereon at maturity, except if those debt securities have been previously redeemed or purchased and cancelled.

Unless otherwise specified in the applicable prospectus supplement, the debt securities of each series will not be listed on any securities exchange.

### Provisions of Indenture

The indenture provides that debt securities may be issued under it from time to time in one or more series. For each series of debt securities, this prospectus and the applicable prospectus supplement will describe the following terms and conditions of that series of debt securities:

- the title of the series;
- the maximum aggregate principal amount, if any, established for debt securities of the series, provided, however, that such amount may from time to time be increased by a board resolution;
- the price or prices at which the debt securities will be sold;
- the person to whom any interest on a debt security of the series will be payable, if other than the person in whose name that debt security (or one or more predecessor debt securities) is registered at the close of business on the regular record date for such interest;

- the date or dates on which the principal and premium, if any, of any debt securities of the series will be payable or the method used to determine or extend those dates;
- the rate or rates at which any debt securities of the series will bear interest, if any, or the method by which such rate or rates shall be determined, the date or dates from which any such interest will accrue, or the method by which such date or dates shall be determined, the interest payment dates on which any such interest will be payable and the regular record date, if any, for any such interest payable on any interest payment date, or the method by which such date or dates shall be determined, and the basis upon which interest shall be calculated if other than that of a 360-day year of twelve 30-day months, the right, if any, to extend or defer interest payments and the duration of such extension or deferral;
- the place or places where the principal of and any premium and interest on any debt securities of the series will be payable, the place or places where the debt securities of such series may be presented for registration of transfer or exchange, the place or places where notices and demands to or upon us in respect of the debt securities of such series may be made and the manner in which any payment may be made;
- the period or periods within which or the date or dates on which, the price or prices at which, the currency or currency units in which, and the terms and conditions upon which any debt securities of the series may be redeemed, in whole or in part, at our option and, if other than by a board resolution, the manner in which any election by us to redeem the debt securities will be evidenced;
- our obligation or right, if any, to redeem or purchase any debt securities of the series pursuant to any sinking fund, amortization or analogous provisions or at the option of the holder thereof and the period or periods within which, the price or prices at which, the currency or currency units in which, and the terms and conditions upon which any debt securities of the series will be redeemed or purchased, in whole or in part, pursuant to such obligation;
- if other than denominations of \$2,000 and any integral multiple of \$1,000 in excess thereof, the denominations in which any debt securities of the series will be issuable;
- if other than the trustee, the identity of each security registrar and/or paying agent;
- if the amount of principal of or premium, if any, or interest on any debt securities of the series may be determined with reference to a financial or economic measure or index or pursuant to a formula, the manner in which such amounts will be determined;
- if other than U.S. dollars, the currency, currencies or currency units in which the principal of or premium, if any, or interest on any debt securities of the series will be payable and the manner of determining the equivalent thereof in U.S. dollars for any purpose;
- if the principal of or premium, if any, or interest on any debt securities of the series is to be payable, at our election or the election of the holder thereof, in one or more currencies or currency units other than that or those in which such debt securities are stated to be payable, the currency, currencies or currency units in which the principal of or premium, if any, or interest on such debt securities as to which such election is made will be payable, the periods within which or the dates on which and the terms and conditions upon which such election is to be made and the amount so payable (or the manner in which such amount will be determined);
- if the provisions of the indenture relating to satisfaction and discharge thereof shall apply to the debt securities of that series as set forth therein, or if provisions for the satisfaction and discharge of the indenture other than as set forth therein shall apply to the debt securities of that series;
- if other than the entire principal amount thereof, the portion of the principal amount of any debt securities of the series which will be payable upon declaration of acceleration of the maturity thereof pursuant to the indenture or the method by which such portion shall be determined;
- if the principal amount payable at the stated maturity of any debt securities of the series will not be determinable as of any one or more dates prior to the stated maturity, the amount which will be deemed to be the principal amount of such debt securities as of any such date for any purpose thereunder or hereunder, including the principal amount thereof which will be due and payable upon any maturity other than the stated maturity or which will be deemed to be outstanding as of any date prior to the stated maturity (or, in any such case, the manner in which such amount deemed to be the principal amount will be determined);

- if other than by a board resolution, the manner in which any election by us to defease any debt securities of the series pursuant to the indenture will be evidenced; whether any debt securities of the series other than debt securities denominated in U.S. dollars and bearing interest at a fixed rate are to be subject to the defeasance provisions of the indenture; or, in the case of debt securities denominated in U.S. dollars and bearing interest at a fixed rate, if applicable, that the debt securities of the series, in whole or any specified part, will not be defeasible pursuant to the indenture;
- if applicable, that any debt securities of the series shall be issuable in whole or in part in the form of one or more global securities and, in such case, the respective depositories for such global securities, the form of any legend or legends which shall be borne by any such global security in addition to or in lieu of that set forth in the indenture and any circumstances in which any such global security may be exchanged in whole or in part for debt securities registered, and any transfer of such global security in whole or in part may be registered, in the name or names of persons other than the depository for such global security or a nominee thereof;
- any addition to, deletion from or change in the events of default applicable to any debt securities of the series and any change in the right of the trustee or the requisite holders of such debt securities to declare the principal amount thereof due and payable;
- any addition to, deletion from or change in the covenants applicable to debt securities of the series;
- the terms of any right to convert or exchange debt securities of such series into any other securities or property of ours or of any other corporation or person, and the additions or changes, if any, to the indenture with respect to the debt securities of such series to permit or facilitate such conversion or exchange;
- whether the debt securities of the series will be guaranteed by any persons and, if so, the identity of such persons, the terms and conditions upon which such debt securities will be guaranteed and, if applicable, the terms and conditions upon which such guarantees may be subordinated to other indebtedness of the respective guarantors;
- whether the debt securities of the series will be secured by any collateral and, if so, the terms and conditions upon which such debt securities will be secured and, if applicable, upon which such liens may be subordinated to other liens securing other indebtedness of us or of any guarantor;
- whether the debt securities will be issued in a transaction registered under the Securities Act and any restriction or condition on the transferability of the debt securities of such series;
- the exchanges, if any, on which the debt securities may be listed; and
- any other terms of the debt securities of the series (which terms will not be inconsistent with the provisions of the indenture, except as permitted thereunder).

## **Interest and Interest Rates**

### ***General***

In the applicable prospectus supplement, we will designate the debt securities of a series as being either debt securities bearing interest at a fixed or floating rate of interest. Each debt security will begin to accrue interest from the date on which it is originally issued. Interest on each such debt security will be payable in arrears on the interest payment dates set forth in the applicable prospectus supplement and as otherwise described below and at maturity or, if earlier, the redemption date described below. Interest will be payable to the holder of record of the debt securities at the close of business on the record date for each interest payment date, which record dates will be specified in such prospectus supplement.

As used in the indenture, the term “business day” means, with respect to debt securities of a series, unless otherwise specified in the applicable prospectus supplement, any day, other than a Saturday or Sunday, that is not a day on which banking institutions are authorized or obligated by law or executive order to close in the place where the principal of and premium, if any, and interest on the debt securities are payable.

If any interest payment date, redemption date, repayment date or stated maturity of a debt security, or any date on which a holder has the right to convert such debt security, falls on a date that is not a business day, then payment of principal and premium, if any, or interest, or the redemption price or conversion of such debt security, will be made on the next succeeding business day at such place of payment with the same force and effect as if made on the interest payment date, redemption date or repayment date, or at the stated maturity, or on such conversion date. No interest shall accrue for the period from and after any such interest payment date, redemption date, repayment date, stated maturity or conversion date, as the case may be, to the date of such payment.

## **Optional Redemption**

### ***Redemption at Our Option***

If specified in the applicable prospectus supplement, we may elect to redeem all or part of the outstanding debt securities of a series from time to time before the maturity date of the debt securities of that series. Upon such election, we will notify the trustee of the redemption date and the principal amount of debt securities of the series to be redeemed. If less than all the debt securities of the series are to be redeemed, the particular debt securities of that series to be redeemed will be selected by the trustee by such method as the trustee deems fair and appropriate. If we shall so direct, debt securities registered in our name or the name of any of our affiliates or subsidiaries shall not be included in the debt securities for redemption. The applicable prospectus supplement will specify the redemption price for the debt securities to be redeemed (or the method of calculating such price), in each case in accordance with the terms and conditions of those debt securities.

Notice of redemption will be given to each holder of the debt securities to be redeemed not less than 15 nor more than 60 days prior to the date set for such redemption (or within such period as otherwise specified as contemplated by the indenture for debt securities of a series). This notice will identify the debt securities to be redeemed and will include the following information: the redemption date; the redemption price (or the method of calculating such price); if less than all of the outstanding debt securities of such series are to be redeemed, the identification (and, in the case of partial redemption, the respective principal amounts) of the particular debt securities to be redeemed; the place or places where such debt securities are to be surrendered for payment of the redemption price; and, if applicable, the CUSIP number of the debt securities to be redeemed.

By no later than 11:00 a.m. (New York City time) on the redemption date, we will deposit or cause to be deposited with the trustee or with a paying agent (or, if we are acting as our own paying agent with respect to the debt securities being redeemed, we will segregate and hold in trust as provided in the indenture) an amount of money sufficient to pay the aggregate redemption price of, and (except if the redemption date shall be an interest payment date or the debt securities of such series provide otherwise) accrued interest on, all of the debt securities or the part thereof to be redeemed on that date. On the redemption date, the redemption price will become due and payable upon all of the debt securities to be redeemed, and interest, if any, on the debt securities to be redeemed will cease to accrue from and after that date. Upon surrender of any such debt securities for redemption, we will pay those debt securities surrendered at the redemption price together, if applicable, with accrued interest to the redemption date. If the redemption date is after a regular record date and on or prior to the applicable interest payment date, the accrued and unpaid interest shall be payable to the holder of the redeemed securities registered on the relevant regular record date.

Any debt securities to be redeemed only in part must be surrendered at the office or agency established by us for such purpose, and we will execute, and the trustee will authenticate and deliver to a holder without service charge, new debt securities of the same series and of like tenor, of any authorized denominations as requested by that holder, in a principal amount equal to and in exchange for the unredeemed portion of the debt securities that holder surrenders.

### ***Repayment at Holder's Option***

If specified in the applicable prospectus supplement, the holders of the debt securities of a series will have the option to elect repayment of those debt securities by us prior to the stated maturity of the debt securities of that series at time or times and subject to the conditions specified in the applicable prospectus supplement. If the holders of those debt securities have that option, the applicable prospectus supplement will specify the optional repayment date or dates on which the debt security may be repaid and the optional repayment price, or the method by which such price will be determined. The optional repayment price is the price at which, together with accrued interest to the optional repayment date, the debt security may be repaid at the holder's option on each such optional repayment date.

Except as otherwise may be provided by the terms of the debt securities, any tender of a debt security by the holder for repayment will be irrevocable unless waived by us. Any repayment option of a holder may be exercised by the holder of debt securities for less than the entire principal amount of the debt security; provided that the principal amount of the debt security remaining outstanding after repayment will be an authorized denomination. Upon such partial repayment, the debt securities will be canceled and new debt securities for the remaining principal amount will be issued in the name of the holder of the repaid debt securities.

If debt securities are represented by a global security as described under “—Book-Entry; Delivery and Form; Global Securities,” the securities depository for the global security or its nominee will be the holder of the debt security and, therefore, will be the only person that can exercise a right to repayment. In order to ensure that the depository or its nominee will timely exercise a right to repayment relating to a particular debt security, the beneficial owner of the debt security must instruct the broker or other direct or indirect participant in the depository through which it holds an interest in the debt security to notify the depository of its desire to exercise a right to repayment by the appropriate cut-off time for notifying the participant. Different firms have different cut-off times for accepting instructions from their customers. Accordingly, you should consult the broker or other direct or indirect participant through which you hold an interest in a debt security in order to ascertain the cut-off time by which such an instruction must be given for timely notice to be delivered to the appropriate depository.

## **Payment and Transfer or Exchange**

Principal of and premium, if any, and interest on the debt securities of each series will be payable, and the debt securities may be exchanged or transferred, at the office or agency maintained by us for such purpose. Payment of principal of and premium, if any, and interest on a global security registered in the name of or held by The Depository Trust Company, or DTC, or its nominee will be made in immediately available funds to DTC or its nominee, as the case may be, as the registered holder of such global security. If any of the debt securities is no longer represented by a global security, payment of interest on certificated debt securities in definitive form may, at our option, be made by check mailed directly to holders at their registered addresses. See “—Book-Entry; Delivery and Form; Global Securities.”

A holder may transfer or exchange any certificated debt securities in definitive form at the same location given in the preceding paragraph. No service charge will be made for any registration of transfer or exchange of debt securities, but we may require payment of a sum sufficient to cover any transfer tax or other similar governmental charge payable in connection therewith.

We are not required to transfer or exchange any debt security selected for redemption for a period of 15 days before mailing of a notice of redemption of the debt security to be redeemed.

The registered holder of a debt security will be treated as the owner of it for all purposes.

All amounts of principal of and premium, if any, or interest on the debt securities paid by us that remain unclaimed two years after such payment was due and payable will be repaid to us, and the holders of such debt securities will thereafter look solely to us for payment.

## **Covenants**

The indenture sets forth limited covenants that will apply to each series of debt securities issued under the indenture, unless otherwise specified in the applicable prospectus supplement. However, these covenants do not, among other things:

- limit the amount of indebtedness or lease obligations that may be incurred by us and our subsidiaries;
- limit our ability or that of our subsidiaries to issue, assume or guarantee debt secured by liens; or
- restrict us from paying dividends or making distributions on our capital stock or purchasing or redeeming our capital stock.

## ***Consolidation, Merger and Sale of Assets***

The indenture provides that we may consolidate with or merge with or into any other person, and may sell, transfer, or lease or convey all or substantially all of our properties and assets to another person; provided that the following conditions are satisfied:

- we are the continuing entity, or the resulting, surviving or transferee person (the “Successor”) is a person (if such person is not a corporation, then the Successor will include a corporate co-issuer of the debt securities) organized and existing under the laws of the United States of America, any state thereof or the District of Columbia and the Successor (if not us) will expressly assume, by supplemental indenture, all of our obligations under the debt securities and the indenture and, for each security that by its terms provides for conversion, provide for the right to convert such security in accordance with its terms;
- immediately after giving effect to such transaction, no default or event of default under the indenture has occurred and is continuing; and
- the trustee receives from us an officers’ certificate and an opinion of counsel that the transaction and such supplemental indenture, as the case may be, complies with the applicable provisions of the indenture

If we consolidate or merge with or into any other person or sell, transfer, lease or convey all or substantially all of our properties and assets in accordance with the indenture, the Successor will be substituted for us in the indenture, with the same effect as if it had been an original party to the indenture. As a result, the Successor may exercise our rights and powers under the indenture, and we will be released from all our liabilities and obligations under the indenture and under the debt securities.

Any substitution of the Successor for us might be deemed for federal income tax purposes to be an exchange of the debt securities for “new” debt securities, resulting in recognition of gain or loss for such purposes and possibly certain other adverse tax consequences to beneficial owners of the debt securities. Holders should consult their own tax advisors regarding the tax consequences of any such substitution.

For purposes of this covenant, "person" means any individual, corporation, partnership, limited liability company, joint venture, association, joint-stock company, trust, unincorporated organization or government or any agency or political subdivision thereof or any other entity.

#### Events of Default

Each of the following events are defined in the indenture as an "event of default" (whatever the reason for such event of default and whether or not it will be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body) with respect to the debt securities of any series:

(1) default in the payment of any installment of interest on any debt securities of such series for 30 days after becoming due;

(2) default in the payment of principal of or premium, if any, on any debt securities of such series when it becomes due and payable at its stated maturity, upon optional redemption, upon declaration or otherwise;

(3) default in the performance, or breach, of any covenant or agreement of ours in the indenture with respect to the debt securities of such series (other than a covenant or agreement, a default in the performance of which or a breach of which is elsewhere in the indenture specifically dealt with or that has expressly been included in the indenture solely for the benefit of a series of debt securities other than such series), which continues for a period of 90 days after written notice to us by the trustee or to us and the trustee by the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series;

(4) we pursuant to or within the meaning of the Bankruptcy Law:

- commence a voluntary case or proceeding;
- consent to the entry of an order for relief against us in an involuntary case or proceeding;
- consent to the appointment of a custodian of us or for all or substantially all of our property;
- make a general assignment for the benefit of our creditors;
- file a petition in bankruptcy or answer or consent seeking reorganization or relief;
- consent to the filing of such petition or the appointment of or taking possession by a custodian; or
- take any comparable action under any foreign laws relating to insolvency;

(5) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:

- is for relief against us in an involuntary case, or adjudicates us insolvent or bankrupt;
- appoints a custodian of us or for all or substantially all of our property; or
- orders the winding-up or liquidation of us (or any similar relief is granted under any foreign laws);

and the order or decree remains unstayed and in effect for 90 days; or

(6) any other event of default provided with respect to debt securities of such series occurs.

"Bankruptcy Law" means Title 11, United States Code or any similar federal or state or foreign law for the relief of debtors. "Custodian" means any custodian, receiver, trustee, assignee, liquidator or other similar official under any Bankruptcy Law.

If an event of default with respect to debt securities of any series (other than an event of default relating to certain events of bankruptcy, insolvency, or reorganization of us) occurs and is continuing, the trustee by notice to us, or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of such series by notice to us and the trustee, may, and the trustee at the request of these holders will, declare the principal of and premium, if any, and accrued and unpaid interest on all the debt securities of such series to be due and payable. Upon such a declaration, such principal, premium and accrued and unpaid interest will be due and payable immediately. If an event of default relating to certain events of bankruptcy, insolvency, or reorganization of us occurs and is continuing, the principal of and premium, if any, and accrued and unpaid interest on the debt securities of such series will become and be immediately due and payable without any declaration or other act on the part of the trustee or any holders.

The holders of not less than a majority in aggregate principal amount of the outstanding debt securities of any series may rescind a declaration of acceleration and its consequences, if we have deposited certain sums with the trustee and all events of default with respect to the debt securities of such series, other than the non-payment of the principal or interest which have become due solely by such acceleration, have been cured or waived, as provided in the indenture.

An event of default for a particular series of debt securities does not necessarily constitute an event of default for any other series of debt securities issued under the indenture.

We are required to furnish the trustee annually within 120 days after the end of our fiscal year a statement by one of our officers to the effect that, to the best knowledge of such officer, we are not in default in the fulfillment of any of our obligations under the indenture or, if there has been a default in the fulfillment of any such obligation, specifying each such default and the nature and status thereof.

No holder of any debt securities of any series will have any right to institute any judicial or other proceeding with respect to the indenture, or for the appointment of a receiver or trustee, or for any other remedy unless:

(1) an event of default has occurred and is continuing and such holder has given the trustee prior written notice of such continuing event of default with respect to the debt securities of such series;

(2) the holders of not less than 25% of the aggregate principal amount of the outstanding debt securities of such series have requested the trustee to institute proceedings in respect of such event of default;

(3) the trustee has been offered indemnity reasonably satisfactory to it against its costs, expenses and liabilities in complying with such request;

(4) the trustee has failed to institute proceedings 60 days after the receipt of such notice, request and offer of indemnity; and

(5) no direction inconsistent with such written request has been given for 60 days by the holders of a majority in aggregate principal amount of the outstanding debt securities of such series.

The holders of a majority in aggregate principal amount of outstanding debt securities of a series will have the right, subject to certain limitations, to direct the time, method and place of conducting any proceeding for any remedy available to the trustee with respect to the debt securities of that series or exercising any trust or power conferred to the trustee, and to waive certain defaults. The indenture provides that if an event of default occurs and is continuing, the trustee will exercise such of its rights and powers under the indenture, and use the same degree of care and skill in their exercise, as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs. Subject to such provisions, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request of any of the holders of the debt securities of a series unless they will have offered to the trustee security or indemnity satisfactory to the trustee against the costs, expenses and liabilities which might be incurred by it in compliance with such request.

Notwithstanding the foregoing, the holder of any debt security will have an absolute and unconditional right to receive payment of the principal of and premium, if any, and interest on that debt security on or after the due dates expressed in that debt security and to institute suit for the enforcement of payment.

#### **Modification and Waivers**

Modification and amendments of the indenture and the debt securities of any series may be made by us and the trustee with the consent of the holders of not less than a majority in aggregate principal amount of the outstanding debt securities of that series affected thereby; provided, however, that no such modification or amendment may, without the consent of the holder of each outstanding debt security of that series affected thereby:

- change the stated maturity of the principal of, or installment of interest on, any debt security;
- reduce the principal amount of any debt security or reduce the amount of the principal of any debt security which would be due and payable upon a declaration of acceleration of the maturity thereof or reduce the rate of interest on any debt security;
- reduce any premium payable on the redemption of any debt security or change the date on which any debt security may or must be redeemed;
- change the coin or currency in which the principal of, premium, if any, or interest on any debt security is payable;
- impair the right of any holder to institute suit for the enforcement of any payment on or after the stated maturity of any debt security (or, in the case of redemption, on or after the redemption date);
- reduce the percentage in principal amount of the outstanding debt securities, the consent of whose holders is required in order to take certain actions;

- reduce the requirements for quorum or voting by holders of debt securities in the indenture or the debt security;
- modify any of the provisions in the indenture regarding the waiver of past defaults and the waiver of certain covenants by the holders of debt securities except to increase any percentage vote required or to provide that certain other provisions of the indenture cannot be modified or waived without the consent of the holder of each debt security affected thereby;
- make any change that adversely affects the right to convert or exchange any debt security or decreases the conversion or exchange rate or increases the conversion price of any convertible or exchangeable debt security, unless such decrease or increase is permitted by the terms of the debt securities; or
- modify any of the above provisions.

We and the trustee may, without the consent of any holders, modify or amend the terms of the indenture and the debt securities of any series with respect to the following:

- to add to our covenants for the benefit of holders of the debt securities of all or any series or to surrender any right or power conferred upon us;
- to evidence the succession of another person to, and the assumption by the successor of our covenants, agreements and obligations under, the indenture pursuant to the covenant described under “—Covenants—Consolidation, Merger and Sale of Assets”;
- to add any additional events of default for the benefit of holders of the debt securities of all or any series;
- to add one or more guarantees for the benefit of holders of the debt securities;
- to secure the debt securities pursuant to the covenants of the indenture;
- to add or appoint a successor or separate trustee or other agent;
- to provide for the issuance of additional debt securities of any series;
- to establish the form or terms of debt securities of any series as permitted by the indenture;
- to comply with the rules of any applicable securities depository;
- to provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- to add to, change or eliminate any of the provisions of the indenture in respect of one or more series of debt securities; provided that any such addition, change or elimination (a) shall neither (1) apply to any debt security of any series created prior to the execution of such supplemental indenture and entitled to the benefit of such provision nor (2) modify the rights of the holder of any such debt security with respect to such provision or (b) shall become effective only when there is no debt security described in clause (a)(1) outstanding;
- to cure any ambiguity, omission, defect or inconsistency;
- to change any other provision; provided that the change does not adversely affect the interests of the holders of debt securities of any series in any material respect;
- to supplement any of the provisions of the indenture to such extent as shall be necessary to permit or facilitate the defeasance and discharge of any series of debt securities pursuant to the indenture; provided that any such action shall not adversely affect the interests of the holders of debt securities of such series or any other series of debt securities in any material respect;
- to comply with the rules or regulations of any securities exchange or automated quotation system on which any of the debt securities may be listed or traded; and
- to add to, change or eliminate any of the provisions of the indenture as shall be necessary or desirable in accordance with any amendments to the Trust Indenture Act, provided that such action does not adversely affect the rights or interests of any holder of debt securities in any material respect.

The holders of at least a majority in aggregate principal amount of the outstanding debt securities of any series may, on behalf of the holders of all debt securities of that series, waive compliance by us with certain restrictive provisions of the indenture. The holders of not less than a majority in aggregate principal amount of the outstanding debt securities of a series may, on behalf of the holders of all debt securities of that series, waive any past default and its consequences under the indenture with respect to the debt securities of that series, except a default (1) in the payment of principal or premium, if any, or interest on debt securities of that series or (2) in respect of a covenant or provision of the indenture that cannot be modified or amended without the consent of the holder of each debt security of that series. Upon any such waiver, such default will cease to exist, and any event of default arising therefrom will be deemed to have been cured, for every purpose of the indenture; however, no such waiver will extend to any subsequent or other default or event of default or impair any rights consequent thereon.

## **Discharge, Defeasance and Covenant Defeasance**

We may discharge certain obligations to holders of the debt securities of a series that have not already been delivered to the trustee for cancellation and that either have become due and payable or will become due and payable within one year (or scheduled for redemption within one year) by depositing with the trustee, in trust, funds in U.S. dollars in an amount sufficient to pay the entire indebtedness including, but not limited to, the principal and premium, if any, and interest to the date of such deposit (if the debt securities have become due and payable) or to the maturity thereof or the redemption date of the debt securities of that series, as the case may be. We may direct the trustee to invest such funds in U.S. Treasury securities with a maturity of one year or less or in a money market fund that invests solely in short-term U.S. Treasury securities.

The indenture provides that we may elect either (1) to defease and be discharged from any and all obligations with respect to the debt securities of a series (except for, among other things, obligations to register the transfer or exchange of the debt securities, to replace temporary or mutilated, destroyed, lost or stolen debt securities, to maintain an office or agency with respect to the debt securities and to hold moneys for payment in trust) (“legal defeasance”) or (2) to be released from our obligations to comply with the restrictive covenants under the indenture, and any omission to comply with such obligations will not constitute a default or an event of default with respect to the debt securities of a series and clauses (3) and (6) under “—Events of Default” will no longer be applied (“covenant defeasance”). Legal defeasance or covenant defeasance, as the case may be, will be conditioned upon, among other things, the irrevocable deposit by us with the trustee, in trust, of an amount in U.S. dollars, or U.S. government obligations, or both, applicable to the debt securities of that series which through the scheduled payment of principal and interest in accordance with their terms will provide money in an amount sufficient to pay the principal or premium, if any, and interest on the debt securities on the scheduled due dates therefor.

If we effect covenant defeasance with respect to the debt securities of any series, the amount in U.S. dollars, or U.S. government obligations, or both, on deposit with the trustee will be sufficient, in the opinion of a nationally recognized firm of independent accountants, to pay amounts due on the debt securities of that series at the time of the stated maturity but may not be sufficient to pay amounts due on the debt securities of that series at the time of the acceleration resulting from such event of default. However, we would remain liable to make payment of such amounts due at the time of acceleration.

We will be required to deliver to the trustee an opinion of counsel that the deposit and related defeasance will not cause the holders and beneficial owners of the debt securities of that series to recognize income, gain or loss for federal income tax purposes. If we elect legal defeasance, that opinion of counsel must be based upon a ruling from the U.S. Internal Revenue Service or a change in law to that effect.

We may exercise our legal defeasance option notwithstanding our prior exercise of our covenant defeasance option.

## **Same-Day Settlement and Payment**

Unless otherwise provided in the applicable prospectus supplement, the debt securities will trade in the same-day funds settlement system of DTC until maturity or until we issue the debt securities in certificated form. DTC will therefore require secondary market trading activity in the debt securities to settle in immediately available funds. We can give no assurance as to the effect, if any, of settlement in immediately available funds on trading activity in the debt securities.

## **Book-Entry; Delivery and Form; Global Securities**

Unless otherwise specified in the applicable prospectus supplement, the debt securities of each series will be issued in the form of one or more global debt securities, in definitive, fully registered form without interest coupons, each of which we refer to as a “global security.” Each such global security will be deposited with the trustee as custodian for DTC and registered in the name of a nominee of DTC in New York, New York for the accounts of participants in DTC.

Investors may hold their interests in a global security directly through DTC if they are DTC participants, or indirectly through organizations that are DTC participants. Except in the limited circumstances described below, holders of debt securities represented by interests in a global security will not be entitled to receive their debt securities in fully registered certificated form.

DTC has advised us as follows: DTC is a limited-purpose trust company organized under New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code and a “clearing agency” registered pursuant to the provisions of Section 17A of the Exchange Act. DTC was created to hold securities of institutions that have accounts with DTC (“participants”) and to facilitate the clearance and settlement of securities transactions among its participants in such securities through electronic book-entry changes in accounts of the participants, thereby eliminating the need for physical movement of securities certificates. DTC’s participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. Access to DTC’s book-entry system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a participant, whether directly or indirectly.

### ***Ownership of Beneficial Interests***

Upon the issuance of each global security, DTC will credit, on its book-entry registration and transfer system, the respective principal amount of the individual beneficial interests represented by the global security to the accounts of participants. Ownership of beneficial interests in each global security will be limited to participants or persons that may hold interests through participants. Ownership of beneficial interests in each global security will be shown on, and the transfer of those ownership interests will be effected only through, records maintained by DTC (with respect to participants' interests) and such participants (with respect to the owners of beneficial interests in the global security other than participants).

So long as DTC or its nominee is the registered holder and owner of a global security, DTC or such nominee, as the case may be, will be considered the sole legal owner of the debt security represented by the global security for all purposes under the indenture, the debt securities and applicable law. Except as set forth below, owners of beneficial interests in a global security will not be entitled to receive certificated debt securities and will not be considered to be the owners or holders of any debt securities represented by the global security. We understand that under existing industry practice, in the event an owner of a beneficial interest in a global security desires to take any actions that DTC, as the holder of the global security, is entitled to take, DTC would authorize the participants to take such action, and that participants would authorize beneficial owners owning through such participants to take such action or would otherwise act upon the instructions of beneficial owners owning through them. No beneficial owner of an interest in a global security will be able to transfer such interest except in accordance with DTC's applicable procedures, in addition to those provided for under the indenture. Because DTC can only act on behalf of participants, who in turn act on behalf of others, the ability of a person having a beneficial interest in a global security to pledge that interest to persons that do not participate in the DTC system, or otherwise to take actions in respect of that interest, may be impaired by the lack of a physical certificate representing that interest.

All payments on the debt securities represented by a global security registered in the name of and held by DTC or its nominee will be made to DTC or its nominee, as the case may be, as the registered owner and holder of the global security.

We expect that DTC or its nominee, upon receipt of any payment of principal, premium, if any, or interest in respect of a global security, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of the global security as shown on the records of DTC or its nominee. We also expect that payments by participants to owners of beneficial interests in the global security held through such participants will be governed by standing instructions and customary practices as is now the case with securities held for accounts for customers registered in the names of nominees for such customers. These payments, however, will be the responsibility of such participants and indirect participants, and neither we, the trustee nor any paying agent will have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in any global security or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests or for any other aspect of the relationship between DTC and its participants or the relationship between such participants and the owners of beneficial interests in the global security.

Unless and until it is exchanged in whole or in part for certificated debt securities, each global security may not be transferred except as a whole by DTC to a nominee of DTC or by a nominee of DTC to DTC or another nominee of DTC. Transfers between participants in DTC will be effected in the ordinary way in accordance with DTC rules and will be settled in same-day funds.

We expect that DTC will take any action permitted to be taken by a holder of debt securities only at the direction of one or more participants to whose account the DTC interests in a global security are credited and only in respect of such portion of the aggregate principal amount of the debt securities as to which such participant or participants has or have given such direction. However, if there is an event of default under the debt securities, DTC will exchange each global security for certificated debt securities, which it will distribute to its participants.

Although we expect that DTC will agree to the foregoing procedures in order to facilitate transfers of interests in each global security among participants of DTC, DTC is under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. None of us, the underwriters or the trustee will have any responsibility for the performance or nonperformance by DTC or its participants or indirect participants of their respective obligations under the rules and procedures governing their operations.

The indenture provides that the global securities will be exchanged for debt securities in certificated form of like tenor and of an equal principal amount, in authorized denominations in the following limited circumstances:

(1) DTC notifies us that it is unwilling or unable to continue as depository or if DTC ceases to be eligible under the indenture and we do not appoint a successor depository within 90 days;

(2) we determine that the debt securities will no longer be represented by global securities and execute and deliver to the trustee an order to such effect; or

(3) an event of default with respect to the debt securities will have occurred and be continuing.

These certificated debt securities will be registered in such name or names as DTC will instruct the trustee. It is expected that such instructions may be based upon directions received by DTC from participants with respect to ownership of beneficial interests in global securities.

The information in this section of this prospectus concerning DTC and DTC's book-entry system has been obtained from sources that we believe to be reliable, but we do not take responsibility for this information.

#### ***Euroclear and Clearstream***

If the depository for a global security is DTC, you may hold interests in the global security through Clearstream Banking *société anonyme*, which we refer to as "Clearstream," or Euroclear Bank SA/NV, as operator of the Euroclear System, which we refer to as "Euroclear," in each case, as a participant in DTC. Euroclear and Clearstream will hold interests, in each case, on behalf of their participants through customers' securities accounts in the names of Euroclear and Clearstream on the books of their respective depositories, which in turn will hold such interests in customers' securities in the depositories' names on DTC's books.

Payments, deliveries, transfers, exchanges, notices and other matters relating to the debt securities made through Euroclear or Clearstream must comply with the rules and procedures of those systems. Those systems could change their rules and procedures at any time. We have no control over those systems or their participants, and we take no responsibility for their activities. Transactions between participants in Euroclear or Clearstream, on one hand, and other participants in DTC, on the other hand, would also be subject to DTC's rules and procedures.

Investors will be able to make and receive through Euroclear and Clearstream payments, deliveries, transfers, exchanges, notices and other transactions involving any securities held through those systems only on days when those systems are open for business. Those systems may not be open for business on days when banks, brokers and other institutions are open for business in the United States.

In addition, because of time-zone differences, U.S. investors who hold their interests in the debt securities through these systems and wish on a particular day, to transfer their interests, or to receive or make a payment or delivery or exercise any other right with respect to their interests, may find that the transaction will not be effected until the next business day in Luxembourg or Brussels, as applicable. Thus, investors who wish to exercise rights that expire on a particular day may need to act before the expiration date. In addition, investors who hold their interests through both DTC and Euroclear or Clearstream may need to make special arrangements to finance any purchase or sales of their interests between the U.S. and European clearing systems, and those transactions may settle later than transactions within one clearing system.

#### **Governing Law**

The indenture and the debt securities will be governed by, and construed in accordance with, the laws of the State of New York.

#### **Regarding the Trustee**

We may from time to time maintain lines of credit, and have other customary banking relationships, with the trustee under the indenture.

The indenture and provisions of the Trust Indenture Act that are incorporated by reference therein contain limitations on the rights of the trustee, should it become one of our creditors, to obtain payment of claims in certain cases or to realize on certain property received by it in respect of any such claim as security or otherwise. The trustee is permitted to engage in other transactions with us or any of our affiliates; provided, however, that if it acquires any conflicting interest (as defined under the Trust Indenture Act), it must eliminate such conflict or resign.

## DESCRIPTION OF CAPITAL STOCK

*The following is a description of our capital stock and certain provisions of our amended and restated articles of incorporation, amended and restated bylaws and certain provisions of applicable law. The following is only a summary and is qualified by applicable law and by the provisions of our amended and restated articles of incorporation and amended and restated bylaws, copies of which are included as exhibits to the registration statement of which this prospectus forms a part. We are incorporated in the State of Nevada. The rights of our stockholders are generally covered by Nevada law and our amended and restated articles of incorporation and amended and restated bylaws. The terms of our capital stock are therefore subject to Nevada law.*

Our authorized capital stock consists of 300,000,000 shares of common stock, \$0.00001 par value per share, and 10,000,000 shares of preferred stock, \$0.00001 par value per share. As of July 13, 2020, 138,854,193 shares of common stock were issued and outstanding and no shares of preferred stock were issued and outstanding.

### Common Stock

Our common stock is traded on the NYSE American under the symbol "XXII." Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. Holders of common stock are entitled to receive ratably such dividends, if any, as may be declared by the board of directors out of funds legally available therefore, subject to a preferential dividend right of outstanding preferred stock. Upon the liquidation, dissolution or our winding up, the holders of common stock are entitled to receive ratably our net assets available after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by the rights of the holders any series of preferred stock that we may designate and issue in the future.

### Preferred Stock

Under the terms of our amended and restated articles of incorporation, the board of directors is authorized, subject to any limitations prescribed by law, without stockholder approval, to issue such shares of preferred stock in one or more series. Each such series of preferred stock shall have such rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, as shall be determined by the board of directors.

The purpose of authorizing the board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing desirable flexibility in connection with possible acquisitions and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from acquiring, a majority of our outstanding voting stock. We have no present plans to issue any additional shares of preferred stock.

The effects of issuing preferred stock could include one or more of the following:

- decreasing the amount of earnings and assets available for distribution to holders of common stock;
- restricting dividends on the common stock;
- diluting the voting power of the common stock;
- impairing the liquidation rights of the common stock; or
- delaying, deferring or preventing changes in our control or management.

As of the date of this prospectus, there were no shares of preferred stock outstanding.

### Stock Options and Restricted Stock

As of July 13, 2020, we had outstanding options to purchase a total of 7,423,696 shares of common stock at a weighted average exercise price of \$1.49 per share. Of this total, options to purchase 6,558,940 were vested and 864,756 remain unvested. As July 13, 2020, we had outstanding 2,942,504 shares of restricted common stock or restricted stock units subject to vesting conditions. As of July 13, 2020, an additional 4,409,969 shares of common stock were available for future award grants under our stock incentive plan.

## Warrants

This prospectus also relates to the issuance of the 11,293,211 shares of common stock issuable upon exercise of the Company's outstanding warrants, described below, which were previously registered under the Prior Registration Statement. The material terms of these warrants are summarized below, which summary is qualified in their entirety by reference to the form of warrant incorporated by reference as an exhibit to the registration statement of which this prospectus is a part.

On November 25, 2019, we entered into a warrant exercise agreement (the "Warrant Exercise Agreement") with all of the holders (the "Exercising Holders") of our previously outstanding warrants to purchase up to 11,293,211 shares of common stock of the Company with an exercise price of \$2.15 per share (the "Original Warrants") whereby the Exercising Holders agreed to exercise all of the Original Warrants at a reduced exercise price of \$1.00 per share. In consideration for the Exercising Holders exercising their Original Warrants for cash, the Company issued to each Exercising Holder a new warrant (each, a "New Warrant") to purchase shares of common stock equal to the number of shares of common stock underlying the Original Warrants. The New Warrants provided for an exercise price of \$1.25 per share, become exercisable immediately and expire 5 years after the issuance date. On December 22, 2019, the Company entered into a Warrant Amendment Agreement with the holders of the New Warrants whereby the Company agreed to amend the New Warrants to (i) reduce the exercise price of the New Warrants to \$1.11 and (ii) to add a call provision whereby the Company may call the New Warrants with prior notice to the holders for \$0.001 per New Warrant (during which time the holders may exercise the New Warrants) provided that the Company's volume weighted average stock price exceeds \$3.00 per share for ten consecutive trading days and certain other conditions are satisfied.

The exercise price of the New Warrants will be adjusted in the event of stock splits, reverse stock splits and the like pursuant to their terms. The holder will not have the right to exercise any portion of the New Warrant if the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of our common stock (including securities convertible into common stock) outstanding immediately after the exercise; provided, however, that the holder may increase or decrease this limitation at any time, although any increase shall not be effective until the 61st day following the notice of increase and the holder may not increase this limitation in excess of 9.99% of the number of shares of our common stock (including securities convertible into common stock) outstanding immediately after the exercise. This prospectus relates to the issuance of the shares of common stock issuable upon exercise of the New Warrants. The New Warrants are only exercisable for cash provided that a registration statement relating to the issuance or resale of the shares issued upon exercise of such New Warrants is effective. If there is no effective registration statement, the New Warrants may be exercised on a cashless basis.

## NYSE American Listing

Our common stock is listed on the NYSE American under the symbol "XXII."

## Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Continental Stock Transfer & Trust Company.

## Anti-Takeover Provisions Under Nevada Law.

*Combinations with Interested Stockholder.* Sections 78.411-78.444, inclusive, of the Nevada Revised Statutes (NRS) contain provisions governing combinations with an interested stockholder. For purposes of the NRS, "combinations" include: (i) any merger or consolidation of a Nevada corporation or any subsidiary of a Nevada corporation with the interested stockholder or any other entity, whether or not itself is an interested stockholder of the Nevada corporation, which is, or after and as a result of the merger or consolidation would be, an affiliate or associate of the interested stockholder; (ii) any sale, lease, exchange mortgage, pledge, transfer or other disposition, in one transaction or a series of transactions, to or with the interested stockholder or any affiliate or associate of the interested stockholder of assets of the Nevada corporation or any subsidiary of the Nevada corporation (x) having an aggregate market value equal to more than 5% of the aggregate market value of all of the consolidated assets of the Nevada corporation, (y) having an aggregate market value equal to more than 5% of the aggregate market value of all the outstanding voting shares of the Nevada corporation, or (z) representing more than 10% of the earning power or net income of the Nevada corporation (determined on a consolidated basis); (iii) the issuance or transfer by the Nevada corporation or any subsidiary of the Nevada corporation, in one transaction or a series of transactions, of any shares of the Nevada corporation or any subsidiary of the Nevada corporation that have an aggregate market value equal to 5% or more of the aggregate market value of all the outstanding voting shares of the Nevada corporation to the interested stockholder or any affiliate or associate of the interested stockholder except under the exercise of warrants or rights to purchase shares offered, or a dividend or distribution paid or made, pro rata to all stockholders of the Nevada corporation; (iv) the adoption of any plan or proposal for the liquidation or dissolution of the Nevada corporation under any agreement, arrangement or understanding, whether or not in writing, with the interested stockholder or affiliate or associate of the interested stockholder; (v) except for transactions that would not constitute a combination pursuant to subsection (iii) above, any reclassification of securities (including share splits, share dividend or other distribution of shares with respect to other shares, or any issuance of new shares in exchange for a proportionately greater number of old shares), any recapitalization of the Nevada corporation, any merger or consolidation of the Nevada corporation with any of its subsidiaries, or any other transaction, whether or not with or into or otherwise involving the interested stockholder, under any agreement, arrangement or understanding, whether or not in writing, with the interested stockholder or any affiliate or associate of the interested stockholder, which has the immediate and proximate effect of increasing the proportionate share of the outstanding shares of any class or series of voting shares or securities convertible into voting shares of the Nevada corporation or any subsidiary of the Nevada corporation which is beneficially owned by the interested stockholder or any affiliate or associate of the interested stockholder, except as a result of immaterial changes because of adjustments of fractional shares; and (vi) any receipt by the interested stockholder or any affiliate or associate of the interested stockholder of the benefit, directly or indirectly, except proportionately as a stockholder of the Nevada corporation, of any loan, advance, guarantee, pledge or other financial assistance or any tax credit or other tax advantage provided by or through the Nevada corporation.

For purposes of the NRS, an "interested stockholder" is defined to include any person, other than the Nevada corporation or any subsidiary of the Nevada corporation, that is: (a) a beneficial owner, directly or indirectly, of 10% or more of the voting power of the outstanding voting shares of the Nevada corporation or (b) an affiliate or associate of the Nevada corporation and was, at any time within two years immediately before the date in question, the beneficial owner, directly or indirectly, of 10% or more of the voting power of the then-outstanding shares of the Nevada corporation.

Subject to certain exceptions, the provisions of the NRS statute governing combinations with interested stockholders provide that a Nevada corporation may not engage in a combination with an interested stockholder for two years after the date that the person first became an interested stockholder unless (i) the combination or the transaction by which the person first became an interested stockholder is approved by the board of directors before the person first became an interested stockholder or (ii) during the two-year period, the transaction is approved by the board and by 60% of the disinterested stockholders at an annual or special meeting of the stockholders.

After such two-year period, corporations subject to these statutes may not engage in specified business combinations and transactions unless: (i) the business combination or transaction by which the person first became an interested stockholder is approved by the board of directors before the stockholder became an interested stockholder; (ii) the business combination is approved by a majority of the outstanding voting power (excluding the shares held by the interested stockholder or any affiliate or associate of the interested stockholder); or (iii) the combination meets the requirements of 78.411 through 78.444 of the NRS, inclusive.

The NRS allows a corporation to "opt out" of NRS 78.411 through 78.444, inclusive, by providing in such corporation's original articles of incorporation or bylaws that such statutes do not apply to the corporation. Unless certain limited exceptions apply, corporations cannot opt out of such statutes by amending their articles of incorporation or bylaws. We have not opted out of such statutes.

*Control Share Acquisitions.* The NRS also contains a "control share acquisitions statute." If applicable to a Nevada corporation, this statute restricts the voting rights of certain stockholders referred to as "acquiring persons," that acquire or offer to acquire ownership of a "controlling interest" in the outstanding voting stock of an "issuing corporation." For purposes of these provisions (i) a "controlling interest" means, with certain exceptions, the ownership of outstanding voting stock sufficient to enable the acquiring person to exercise one-fifth or more but less than one-third, one-third or more but less than a majority, or a majority or more of all voting power in the election of directors and (ii) an "issuing corporation" means a Nevada corporation, as of any date, that has 200 or more stockholders of record, at least 100 of whom have addresses in Nevada appearing on the stock ledger of the corporation at all times during the 90 days immediately preceding such date, and which does business in Nevada directly or through an affiliated corporation. The voting rights of an acquiring person in the affected shares will be restored only if such restoration is approved by the holders of a majority of the voting power of the corporation (excluding the shares held by the acquiring person) at an annual or special meeting of the stockholders.

The NRS allows a corporation to "opt out" of the control share acquisitions statute by providing in such corporation's articles of incorporation or bylaws, in effect on the 10th day following the acquisition of a controlling interest by an acquiring person, that the control share acquisitions statute does not apply to the corporation or to an acquisition of a controlling interest specifically by types of existing or future stockholders, whether or not identified. We have not opted out of the control share acquisitions statute.

#### **Liability and Indemnification of Directors and Officers**

NRS Sections 78.7502 and 78.751 provide us with the power to indemnify any of our directors, officers, employees or agents, or any person who serves or served at the corporation's request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise (for purposes of this section, the "Indemnitee" or "Indemnitees") against expenses, including attorneys' fees, actually and reasonably incurred related to any threatened, pending or completed action, suit or proceeding (whether civil, criminal, administrative or investigative) arising by reason of an Indemnitee's status as a director, officer employee or agent of the corporation if: (i) the Indemnitee is not liable for breach of fiduciary duties to the corporation involving intentional misconduct, fraud or knowing violation of law; (ii) the Indemnitee conducted himself or herself in good faith and reasonably believes that his or her conduct was in, or not opposed to, our best interests; or (iii) in a criminal action, the Indemnitee must not have had reasonable cause to believe that his or her conduct was unlawful. NRS Section 78.751 requires us to indemnify any Indemnitee for any expenses referenced above if the Indemnitee has been successful on the merits or otherwise in defense of the foregoing actions, suits or proceedings.

Under NRS Section 78.7502, any discretionary indemnification, unless ordered by a court or advanced by the corporation in accordance with NRS Section 78.751(2), can only occur if deemed proper by (i) the stockholders; (ii) a majority vote of a quorum consisting of disinterested directors; or (iii) an independent counsel's written legal opinion (if such an approach is approved by a majority vote of a quorum consisting of disinterested directors or if a quorum consisting of disinterested directors cannot be obtained). Under NRS Section 78.751(2), advances for expenses may be made by agreement if the Indemnitee affirms in writing that he or she believes that he or she has met the statutory standards and will personally repay the expenses if a court of competent jurisdiction determines that such Indemnitee did not meet the statutory standards.

Our amended and restated bylaws include an indemnification provision under which we have the power to indemnify, to the extent permitted under Nevada law, our current and former directors and officers, or any person who serves or served at our request for our benefit as a director or officer of another corporation or our representative in a partnership, joint venture, trust or other enterprise, against all expenses, liability and loss reasonably incurred by reason of being or having been a director, officer or representative of ours or any of our subsidiaries. We may make advances for expenses upon receipt of an undertaking by or on behalf of the director or officer to repay the amount if it is ultimately determined by a court of competent jurisdiction that he, she or it is not entitled to be indemnified by us.

Our amended and restated articles of incorporation provides that we shall indemnify directors and officers to the fullest extent permitted by the NRS. Our amended and restated articles of incorporation also provide a limitation of liability such that no director or officer shall be personally liable to us or any of our stockholders to the fullest extent permitted by the NRS.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended (the "Securities Act") may be permitted to directors, officers and controlling persons of ours under Nevada law or otherwise, we have been advised that the opinion of the SEC is that such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event a claim for indemnification against such liabilities (other than payment by us for expenses incurred or paid by a director, officer or controlling person of ours in successful defense of any action, suit, or proceeding) is asserted by a director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our legal counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by our company is against public policy in the Securities Act and will be governed by the final adjudication of such issue.

## DESCRIPTION OF WARRANTS

We may issue other warrants in the future for the purchase of debt securities, common stock, preferred stock, units or other securities. Warrants may be issued independently or together with debt securities, common stock, preferred stock or units offered by any prospectus supplement and/or other offering material and may be attached to or separate from any such offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a bank or trust company, as warrant agent, provided that we may also act as warrant agent and enter into warrant agreements directly with the purchasers of securities offered pursuant to this prospectus. In each case, the terms of the warrants will be set forth in the prospectus supplement and/or other offering material relating to the particular issue of warrants. The warrant agent, if any, will act solely as our agent in connection with the warrants and will not assume any obligation or relationship of agency or trust for or with any holders of warrants or beneficial owners of warrants.

The following summary of certain provisions of the warrants we may issue in the future does not purport to be complete and is subject to, and is qualified in its entirety by reference to, all provisions of the warrant agreements.

Reference is made to the prospectus supplement and/or other offering material relating to the particular issue of warrants offered pursuant to such prospectus supplement and/or other offering material for the terms of and information relating to such warrants, including, where applicable:

- the designation, aggregate principal amount, currencies, denominations and terms of the series of debt securities purchasable upon exercise of warrants to purchase debt securities and the price at which such debt securities may be purchased upon such exercise;
- the number of shares of common stock or preferred stock purchasable upon the exercise of warrants and the price at which such number of shares of common stock or preferred stock may be purchased upon such exercise;
- the designation and number of units of other securities purchasable upon the exercise of warrants to purchase other securities and the price at which such number of units of such other securities may be purchased upon such exercise;
- the date on which the right to exercise such warrants shall commence and the date on which such right shall expire;
- U.S. federal income tax consequences applicable to such warrants;
- the amount of warrants outstanding as of the most recent practicable date; and
- any other terms of such warrants.

Warrants will be issued in registered form only. The exercise price for warrants will be subject to adjustment in accordance with the applicable prospectus supplement and/or other offering material.

Each warrant will entitle the holder thereof to purchase such principal amount of debt securities or such number of shares of common stock, preferred stock, units or other securities at such exercise price as shall in each case be set forth in, or calculable from, the prospectus supplement and/or other offering material relating to the warrants, which exercise price may be subject to adjustment upon the occurrence of certain events as set forth in such prospectus supplement and/or other offering material. After the close of business on the expiration date, or such later date to which such expiration date may be extended by us, unexercised warrants will become void. The place or places where, and the manner in which, warrants may be exercised shall be specified in the prospectus supplement and/or other offering material relating to such warrants.

Prior to the exercise of any warrants to purchase debt securities, common stock, preferred stock, units or other securities, holders of such warrants will not have any of the rights of holders of the underlying securities, as the case may be, purchasable upon such exercise, including the right to receive payments of principal of, premium, if any, or interest, if any, on the debt securities purchasable upon such exercise or to enforce covenants in the applicable indenture, or to receive payments of dividends, if any, on the common stock purchasable upon such exercise, or to exercise any applicable right to vote.

## DESCRIPTION OF SUBSCRIPTION RIGHTS

We may issue subscription rights to purchase debt securities, common stock, preferred stock, warrants, units other securities described in this prospectus or any combination thereof. These subscription rights may be issued independently or together with any other security offered by us and may or may not be transferable by the stockholder receiving the subscription rights in such offering. In connection with any offering of subscription rights, we may enter into a standby arrangement with one or more underwriters or other investors pursuant to which the underwriters or other investors may be required to purchase any securities remaining unsubscribed for after such offering.

To the extent appropriate, the applicable prospectus supplement will describe the specific terms of the subscription rights to purchase shares of our securities offered thereby, including the following:

- the date of determining the stockholders entitled to the rights distribution;
- the price, if any, for the subscription rights;
- the exercise price payable for the debt securities, common stock, preferred stock, warrants, units or other securities upon the exercise of the subscription right;
- the number of subscription rights issued to each stockholder;
- the amount of debt securities, common stock, preferred stock, warrants, units or other securities that may be purchased per each subscription right;
- any provisions for adjustment of the amount of securities receivable upon exercise of the subscription rights or of the exercise price of the subscription rights;
- the extent to which the subscription rights are transferable;
- the date on which the right to exercise the subscription rights shall commence, and the date on which the subscription rights shall expire;
- the extent to which the subscription rights may include an over-subscription privilege with respect to unsubscribed securities;
- the material terms of any standby underwriting or purchase arrangement entered into by us in connection with the offering of subscription rights;
- any applicable federal income tax considerations; and
- any other terms of the subscription rights, including the terms, procedures and limitations relating to the transferability, exchange and exercise of the subscription rights.

## DESCRIPTION OF SECURITIES PURCHASE CONTRACTS

We may issue securities purchase contracts, which consist of contracts obligating holders to purchase from us, and obligating us to sell to the holders, a specified number of shares of common stock, preferred stock, warrants, units, debt securities or other securities at a future date or dates, which we refer to in this prospectus as “securities purchase contracts.” The terms and conditions for any purchase and sale rights or obligations, as well as the price per share of the underlying securities (if applicable) and the number or value of the underlying securities, may be fixed at the time the securities purchase contracts are issued or may be determined by reference to a specific formula set forth in the securities purchase contracts.

The securities purchase contracts may be issued separately or as part of units, other securities or debt obligations of third parties, including U.S. treasury securities, securing the holders’ obligations to purchase the securities under the securities purchase contracts. The securities purchase contracts may require holders to secure their obligations under the securities purchase contracts in a specified manner. The securities purchase contracts also may require us to make periodic payments to the holders thereof or vice versa, and those payments may be unsecured or refunded on some basis.

The securities purchase contracts, and, if applicable, collateral or depositary arrangements, relating to the securities purchase contracts, will be filed with the SEC in connection with the offering of securities purchase contracts. The prospectus supplement and/or other offering material relating to a particular issue of securities purchase contracts will describe the terms of those securities purchase contracts, including the following:

- if applicable, a discussion of material U.S. federal income tax considerations; and
- any other information we think is important about the securities purchase contracts.

## DESCRIPTION OF UNITS

As specified in the applicable prospectus supplement, we may issue units consisting of one or more shares of common stock, shares of preferred stock, debt securities, warrants, subscription rights and securities purchase contracts, or any combination of the foregoing.

The applicable prospectus supplement will specify the following terms of the units:

- the terms of the underlying securities comprising the units, including whether and under what circumstances the underlying securities may be traded separate of the units;
- a description of the terms of any unit agreement governing the units (if any);
- if appropriate, a discussion of material U.S. federal income tax considerations; and
- a description of the provisions for the payment, settlement, transfer or exchange of the units.

## PLAN OF DISTRIBUTION

We may sell securities in any one or more of the following ways from time to time: (i) through agents; (ii) to or through underwriters; (iii) through brokers or dealers; (iv) directly to purchasers, including through a specific bidding, auction or other process; (v) upon the exercise of subscription rights that may be distributed to our stockholders; or (vi) through a combination of any of these methods of sale. The applicable prospectus supplement and/or other offering material will contain the terms of the transaction, name or names of any underwriters, dealers, agents and the respective amounts of securities underwritten or purchased by them, the initial public offering price of the securities, and the applicable agent's commission, dealer's purchase price or underwriter's discount. Any dealers and agents participating in the distribution of the securities may be deemed to be underwriters, and compensation received by them on resale of the securities may be deemed to be underwriting discounts.

Any initial offering price, dealer purchase price, discount or commission may be changed from time to time.

The securities may be distributed from time to time in one or more transactions, at negotiated prices, at a fixed price or fixed prices (that may be subject to change), at market prices prevailing at the time of sale, in at-the-market offerings, at various prices determined at the time of sale or at prices related to prevailing market prices.

Offers to purchase securities may be solicited directly by us or by agents designated by us from time to time. Any such agent may be deemed to be an underwriter, as that term is defined in the Securities Act, of the securities so offered and sold.

If underwriters are utilized in the sale of any securities in respect of which this prospectus is being delivered, such securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including negotiated transactions, at fixed public offering prices or at varying prices determined by the underwriters at the time of sale. Securities may be offered to the public either through underwriting syndicates represented by managing underwriters or directly by one or more underwriters. If any underwriter or underwriters are utilized in the sale of securities, unless otherwise indicated in the applicable prospectus supplement and/or other offering material, the obligations of the underwriters are subject to certain conditions precedent, and that the underwriters will be obligated to purchase all such securities if any are purchased.

If a dealer is utilized in the sale of the securities in respect of which this prospectus is delivered, we will sell such securities to the dealer, as principal. The dealer may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale. Transactions through brokers or dealers may include block trades in which brokers or dealers will attempt to sell shares as agent but may position and resell as principal to facilitate the transaction or in crosses, in which the same broker or dealer acts as agent on both sides of the trade. Any such dealer may be deemed to be an underwriter, as such term is defined in the Securities Act, of the securities so offered and sold.

Offers to purchase securities may be solicited directly by us and the sale thereof may be made directly to institutional investors or others, who may be deemed to be underwriters within the meaning of the Securities Act with respect to any resale thereof.

If so indicated in the applicable prospectus supplement and/or other offering material, we may authorize agents and underwriters to solicit offers by certain institutions to purchase securities at the public offering price set forth in the applicable prospectus supplement and/or other offering material pursuant to delayed delivery contracts providing for payment and delivery on the date or dates stated in the applicable prospectus supplement and/or other offering material. Such delayed delivery contracts will be subject only to those conditions set forth in the applicable prospectus supplement and/or other offering material.

Agents, underwriters and dealers may be entitled under relevant agreements to indemnification against certain liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which such agents, underwriters and dealers may be required to make in respect thereof. The terms and conditions of any indemnification or contribution will be described in the applicable prospectus supplement and/or other offering material.

We may also sell shares of our common stock through various arrangements involving mandatorily or optionally exchangeable securities, and this prospectus may be delivered in connection with those sales.

We may engage in at-the-market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. To the extent that we make sales through one or more underwriters or agents in at-the-market offerings, we will do so pursuant to the terms of a sales agency financing agreement or other at-the-market offering arrangement between us and the underwriters or agents. If we engage in at-the-market sales pursuant to any such agreement or arrangement, we will issue and sell our securities through one or more underwriters or agents, which may act on an agency basis or a principal basis. During the term of any such agreement or arrangement, we may sell securities on a daily basis in exchange transactions or otherwise as we agree with the underwriters or agents. Any such agreement or arrangement will provide that any securities sold will be sold at prices related to the then-prevailing market prices for our securities. Therefore, exact figures regarding proceeds that will be raised or commissions to be paid cannot be determined at this time. Pursuant to the terms of the agreement or arrangement, we may agree to sell, and the relevant underwriters or agents may agree to solicit offers to purchase blocks of our common stock. The terms of any such agreement or arrangement will be set forth in more detail in the applicable prospectus supplement.

We may enter into derivative, sale or forward sale transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement and/or other offering material indicates, in connection with those transactions, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement and/or other offering material, including in short sale transactions and by issuing securities not covered by this prospectus but convertible into, or exchangeable for or representing beneficial interests in such securities covered by this prospectus, or the return of which is derived in whole or in part from the value of such securities. The third parties may use securities received under derivative, sale or forward sale transactions, or securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those transactions to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement (or a post-effective amendment) and/or other offering material.

Underwriters, broker-dealers or agents may receive compensation in the form of commissions, discounts or concessions from us. Underwriters, broker-dealers or agents may also receive compensation from the purchasers of shares for whom they act as agents or to whom they sell as principals, or both. Compensation as to a particular underwriter, broker-dealer or agent might be in excess of customary commissions and will be in amounts to be negotiated in connection with transactions involving shares. In effecting sales, broker-dealers may arrange for other broker-dealers to participate in the resales.

Each series of securities will be a new issue and, other than the common stock, which is listed on the NYSE American, will have no established trading market. We may elect to list any series of securities on an exchange, and in the case of the common stock, on any additional exchange, but, unless otherwise specified in the applicable prospectus supplement and/or other offering material, we shall not be obligated to do so. No assurance can be given as to the liquidity of the trading market for any of the securities.

Agents, underwriters and dealers may engage in transactions with, or perform services for us and our respective subsidiaries in the ordinary course of business.

Any underwriter may engage in over-allotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time. An underwriter may carry out these transactions on the NYSE American, in the over-the-counter market or otherwise.

The place and time of delivery for securities will be set forth in the accompanying prospectus supplement and/or other offering material for such securities.

## WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. The SEC maintains an internet site that contains reports, proxy and information statements and other information regarding issuers, including ours, that file electronically with the SEC. The public can obtain any document that we file electronically with the SEC at [www.sec.gov](http://www.sec.gov).

We are “incorporating by reference” specified documents that we file with the SEC, which means:

- incorporated documents are considered part of this prospectus;
- we are disclosing important information to you by referring you to those documents; and
- information we file with the SEC will automatically update and supersede information contained in this prospectus.

We incorporate by reference the documents listed below and any future filings we make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the registration statement on Form S-3 filed under the Securities Act with respect to securities offered by this prospectus and prior to the effectiveness of such registration statement and (ii) after the date of this prospectus and before the end of the offering of the securities pursuant to this prospectus:

- : [our Annual Report on Form 10-K for the year ended December 31, 2019](#);
- : [our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020](#);
- : [our Definitive Proxy Statement on Schedule 14A filed March 17, 2020](#);
- our Current Reports on Form 8-K filed [January 3, 2020](#), [January 13, 2020](#), [May 1, 2020](#), [May 5, 2020](#), [May 12, 2020](#) and [June 3, 2020](#); and
- : [The description of our common stock contained in or incorporated into our Registration Statement on Form 8-A, filed March 6, 2014, and any amendment or report updating that description.](#)

Information in this prospectus supersedes related information in the documents listed above, and information in subsequently filed documents supersedes related information in both this prospectus and the incorporated documents.

We will provide, without charge to you, upon written or oral request, a copy of any or all of the documents incorporated by reference in this prospectus, other than exhibits to those documents, unless the exhibits are specifically incorporated by reference in those documents. Requests should be directed to our principal executive offices at:

22nd Century Group, Inc.  
8560 Main Street, Suite 4  
Williamsville, New York 14221  
(716) 270-1523

You can also find these filings on our website at [www.xxicentury.com](http://www.xxicentury.com). We are not incorporating the information on our website other than these filings into this prospectus.

## LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon for us by Foley & Lardner LLP. The validity of the securities offered by this prospectus will be passed upon for any underwriters or agents by counsel named in the applicable prospectus supplement. The opinions of Foley & Lardner LLP and counsel for any underwriters or agents may be conditioned upon and may be subject to assumptions regarding future action required to be taken by us and any underwriters, dealers or agents in connection with the issuance of any securities. The opinions of Foley & Lardner LLP and counsel for any underwriters or agents may be subject to other conditions and assumptions, as indicated in the prospectus supplement.

## EXPERTS

The consolidated financial statements of 22nd Century Group, Inc. as of December 31, 2019 and 2018, and for the years then ended, have been incorporated by reference herein in reliance upon the report of Freed Maxick CPAs, P.C., independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. To the extent that Freed Maxick CPAs, P.C. audits and reports on consolidated financial statements of 22nd Century Group, Inc. at future dates and consents to the use of their reports thereon, such consolidated financial statements also will be incorporated by reference in the registration statement in reliance upon their reports and said authority.

## PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

#### Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the expenses, other than underwriting discounts and commissions, payable by us in connection with the sale of the securities being registered hereby are currently anticipated as follows (all amounts are estimated except the SEC registration fee):

	Amount to be paid	
SEC Registration Fee	\$	12,980
Accounting Fees and Expenses		*
Legal Fees and Expenses		*
Miscellaneous Expenses (including any applicable listing fees, printing fees, and transfer agent fees and expenses)		*
Total	\$	*

\* These fees and expenses depend on the securities offered and the number of issuances, and accordingly cannot be estimated at this time and will be reflected in the applicable prospectus supplement.

#### Item 15. Indemnification of Directors and Officers.

NRS Sections 78.7502 and 78.751 provide us with the power to indemnify any of our directors, officers, employees or agents, or any person who serves or served at the corporation's request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise (for purposes of this section, the "Indemnitee" or "Indemnitees") against expenses, including attorneys' fees, actually and reasonably incurred related to any threatened, pending or completed action, suit or proceeding (whether civil, criminal, administrative or investigative) arising by reason of an Indemnitee's status as a director, officer employee or agent of the corporation if: (i) the Indemnitee is not liable for breach of fiduciary duties to the corporation involving intentional misconduct, fraud or knowing violation of law; (ii) the Indemnitee conducted himself or herself in good faith and reasonably believes that his or her conduct was in, or not opposed to, our best interests; or (iii) in a criminal action, the Indemnitee must not have had reasonable cause to believe that his or her conduct was unlawful. NRS Section 78.751 requires us to indemnify any Indemnitee for any expenses referenced above if the Indemnitee has been successful on the merits or otherwise in defense of the foregoing actions, suits or proceedings.

Under NRS Section 78.7502, any discretionary indemnification, unless ordered by a court or advanced by the corporation in accordance with NRS Section 78.751(2), can only occur if deemed proper by (i) the stockholders; (ii) a majority vote of a quorum consisting of disinterested directors; or (iii) an independent counsel's written legal opinion (if such an approach is approved by a majority vote of a quorum consisting of disinterested directors or if a quorum consisting of disinterested directors cannot be obtained). Under NRS Section 78.751(2), advances for expenses may be made by agreement if the Indemnitee affirms in writing that he or she believes that he or she has met the statutory standards and will personally repay the expenses if a court of competent jurisdiction determines that such Indemnitee did not meet the statutory standards.

Our amended and restated bylaws include an indemnification provision under which we have the power to indemnify, to the extent permitted under Nevada law, our current and former directors and officers, or any person who serves or served at our request for our benefit as a director or officer of another corporation or our representative in a partnership, joint venture, trust or other enterprise, against all expenses, liability and loss reasonably incurred by reason of being or having been a director, officer or representative of ours or any of our subsidiaries. We may make advances for expenses upon receipt of an undertaking by or on behalf of the director or officer to repay the amount if it is ultimately determined by a court of competent jurisdiction that he, she or it is not entitled to be indemnified by us.

Our amended and restated articles of incorporation provides that we shall indemnify directors and officers to the fullest extent permitted by the NRS. Our amended and restated articles of incorporation also provide a limitation of liability such that no director or officer shall be personally liable to us or any of our stockholders to the fullest extent permitted by the NRS.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended (the "Securities Act") may be permitted to directors, officers and controlling persons of ours under Nevada law or otherwise, we have been advised that the opinion of the SEC is that such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event a claim for indemnification against such liabilities (other than payment by us for expenses incurred or paid by a director, officer or controlling person of ours in successful defense of any action, suit, or proceeding) is asserted by a director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our legal counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by our company is against public policy in the Securities Act and will be governed by the final adjudication of such issue.

## Item 16. Exhibits.

The exhibits listed in the following Exhibit Index are filed as part of this Registration Statement.

### EXHIBIT INDEX

EXHIBIT NUMBER	DESCRIPTION
1.1	Form of Underwriting Agreement.*
4.1	<a href="#">Amended and Restated Certificate of Incorporation of the Company (incorporated herein by reference to Exhibit 3.2 of the Company's Annual Report on Form 10-K for the year ended September 30, 2010 filed with the Commission on December 1, 2010).</a>
4.1.1	<a href="#">Amendment to Certificate of Incorporation of the Company (incorporated by reference to Appendix A to the Company's Definitive Proxy Statement filed with the Commission on March 4, 2014).</a>
4.2	<a href="#">Amended and Restated Bylaws of the Company (incorporated herein by reference to Exhibit 3.2 of the Company's Annual Report on Form 10-K for the year ended December 31, 2014 filed with the Commission on January 30, 2014).</a>
4.2.2	<a href="#">Amendment No. 1 to Amended and Restated Bylaws of the Company (incorporated herein by reference to Exhibit 3.2 of the Company's Form 8-K filed with the Commission on April 28, 2015).</a>
4.3	<a href="#">Form of New Warrant Agreement (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed with the Commission on November 25, 2019)</a>
4.4	<a href="#">Form of Indenture.</a>
4.5	Form of Debt Securities.*
4.6.3	Form of Certificate of Designations.*
4.7	Form of Warrant.*
4.8	Form of Warrant Agreement.*
4.9	Form of Securities Purchase Contract.*
4.10	Form of Unit Agreement.*
5.1	<a href="#">Opinion of Foley &amp; Lardner LLP (including consent of counsel).</a>
23.1	<a href="#">Consent of Freed Maxick CPAs, P.C.</a>
23.2	<a href="#">Consent of Foley &amp; Lardner LLP (included in Exhibit 5.1 filed herewith).</a>
24	<a href="#">Powers of Attorney (included on the signature page to this Registration Statement).</a>
25	Form T-1 Statement of Eligibility and Qualification under the Trust Indenture Act of 1939.**

\* If required, to be filed by amendment or under subsequent Current Report on Form 8-K.

\*\* To be filed in accordance with the requirements of Section 305(b)(2) of the Trust Indenture Act of 1939 and Rule 5b-3 thereunder.

## Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

- (iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

*provided, however*, that paragraphs (i), (ii) and (iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

- (5) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

- (i) If the registrant is relying on Rule 430B:

- A. Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

- B. Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which the prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; *provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

- (ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

- (6) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
  - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
  - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of its annual reports pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (h) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question as to whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.
- (j) The undersigned registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the Commission under Section 305(b)(2) of the Trust Indenture Act.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Williamsville, State of New York, on July 21, 2020.

### 22nd Century Group, Inc.

By: /s/ James A. Mish  
James A. Mish  
Chief Executive Officer

## POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities indicated below on July 21, 2020. Each person whose signature appears below constitutes and appoints James A. Mish and John Franzino, his or her true and lawful attorney-in-fact and agent, with full power of substitution and revocation, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and any additional registration statement to be filed pursuant to Rule 462(b) under the Securities Act of 1933, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or either of them, may lawfully do or cause to be done by virtue hereof.

<u>Signature</u>	<u>Title</u>
<u>/s/ James A. Mish</u> James A. Mish	Chief Executive Officer (Principal Executive Officer)
<u>/s/ John Franzino</u> John Franzino	Chief Financial Officer (Principal Financial and Accounting Officer)
<u>/s/ Nora B. Sullivan</u> Nora B. Sullivan	Chairman of the Board of Directors
<u>/s/ Richard M. Sanders</u> Richard M. Sanders	Director
<u>/s/ Roger D. O'Brien</u> Roger D. O'Brien	Director
<u>/s/ Clifford B. Fleet</u> Clifford B. Fleet	Director

22ND CENTURY GROUP, INC.

*as issuer*

*and*

[NAME OF TRUSTEE],

*as trustee*

---

INDENTURE

Dated as of [\_\_\_\_\_]

CERTAIN SECTIONS OF THIS INDENTURE  
RELATING TO SECTIONS 310 THROUGH 318 INCLUSIVE,  
OF THE TRUST INDENTURE ACT OF 1939

<b>Trust Indenture Act Section</b>	<b>INDENTURE Section</b>
Section 310(a)(1)	Section 6.9
(a)(2)	Section 6.9
(a)(3)	Not Applicable
(a)(4)	Not Applicable
(b)	Section 6.8
Section 311(a)	Section 6.10
(b)	Section 6.13
Section 312(a)	Section 6.13
(b)	Section 7.1
(c)	Section 7.2
Section 313(a)	Section 7.2
(b)	Section 7.2
(c)	Section 7.3
(d)	Section 7.3
Section 314(a)	Section 7.3
(a)(4)	Section 7.3
(b)	Section 7.4
(c)(1)	Section 10.4
(c)(2)	Not Applicable
(c)(3)	Section 1.2
(d)	Section 1.2
(e)	Not Applicable
Section 315(a)	Not Applicable
(b)	Section 1.2
(c)	Section 6.1
(d)	Section 6.2
(e)	Section 6.1
Section 316(a)	Section 6.1
(a)(1)(A)	Section 5.13
(a)(1)(B)	Section 5.11
(a)(2)	Section 5.12
(b)	Section 5.2 Section 5.11
(c)	Section 5.12
Section 317(a)(1)	Not Applicable
(a)(2)	Section 5.8
(b)	Section 1.4
Section 318(a)	Section 5.3
	Section 5.4
	Section 10.3
	Section 1.7

NOTE: This reconciliation and tie shall not, for any purpose, be deemed to be a part of this Indenture.

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INDENTURE, dated as of [\_\_\_\_\_], between 22ND CENTURY GROUP, INC., a corporation duly organized and existing under the laws of the State of Nevada (herein called the "Company"), and [Name of Trustee], a national banking association duly organized and existing under the laws of the United States, as Trustee (herein called the "Trustee").

#### RECITALS OF THE COMPANY

The Company has duly **authorized** the execution and delivery of this Indenture to provide for the issuance from time to time of its debt securities (herein called the "Securities"), to be issued in one or more series as in this Indenture provided.

All things necessary to make this Indenture a valid agreement of the Company, in accordance with its terms, have been done.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

For and in consideration of the premises and the purchase of the Securities by the Holders thereof, it is mutually agreed, for the equal and proportionate benefit of all Holders of the Securities or of any series thereof, as follows:

#### ARTICLE I DEFINITIONS AND OTHER PROVISIONS OF GENERAL APPLICATION

##### 1.1 Definitions.

For all purposes of this Indenture, except as otherwise expressly provided or unless the context otherwise requires:

- (1) the terms defined in this Article I have the meanings assigned to them in this Article I and include the plural as well as the singular;
  - (2) all other terms used herein which are defined in the Trust Indenture Act, either directly or by reference therein, have the meanings assigned to them therein;
  - (3) all accounting terms not otherwise defined herein have the meanings assigned to them in accordance with GAAP;
  - (4) unless the context otherwise requires, any reference to an "Article" or a "Section" refers to an Article or a Section, as the case may be, of this Indenture;
  - (5) the words "herein," "hereof" and "hereunder" and other words of similar import refer to this Indenture as a whole and not to any particular Article, Section or other subdivision;
  - (6) "including" means including without limitation;
  - (7) "or" is inclusive;
  - (8) references to statutes are to be construed as including all statutory provisions consolidating, amending or replacing the statute referred to;
  - (9) when used with respect to any Security, the words "convert," "converted" and "conversion" are intended to refer to the right of the Holder or the Company to convert or exchange such Security into or for securities or other property in accordance with such terms, if any, as may hereafter be specified for such Security as contemplated by Section 3.1, and these words are not intended to refer to any right of the Holder or the Company to exchange such Security for other Securities of the same series and like tenor pursuant to Section 3.4 Section 3.5, Section 3.6, Section 9.6 or Section 11.7 or another similar provisions of this Indenture, unless the context otherwise requires; and references herein to the terms of any Security that may be converted mean such terms as may be specified for such Security as contemplated in Section 3.1; and
-

(10) unless otherwise provided, references to agreements and other instruments shall be deemed to include all amendments and other modifications to such agreements and instruments, but only to the extent such amendments and other modifications are not prohibited by the terms of this Indenture.

“Act,” when used with respect to any Holder, has the meaning specified in Section 1.4.

“Affiliate” means, with respect to any specified Person, any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For purposes of this definition, “control” when used with respect to any specified Person means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms “controlling” and “controlled” have meanings correlative to the foregoing.

“Applicable Procedures” means, with respect to a Depository, as to any matter at any time, the policies and procedures of such Depository, if any, that are applicable to such matter at such time.

“Authenticating Agent” means any Person authorized by the Trustee pursuant to Section 6.14 to act on behalf of the Trustee to authenticate Securities of one or more series.

“Bankruptcy Law” has the meaning specified in Section 5.1.

“Board of Directors” means either the Board of Directors of the Company or any duly authorized committee of that Board of Directors.

“Board Resolution” means a copy of one or more resolutions certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors and to be in full force and effect on the date of such certification and delivered to the Trustee.

“Business Day” means, when used with respect to any Place of Payment, unless otherwise specified as contemplated by Section 3.1, any day, other than a Saturday or Sunday, which is not a day on which banking institutions are authorized or obligated by law or executive order to close in that Place of Payment.

“Commission” means the U.S. Securities and Exchange Commission, from time to time constituted, created under the Exchange Act, or, if at any time after the execution of this Indenture such Commission is not existing and performing the duties now assigned to it under the Trust Indenture Act, then the body performing such duties at such time.

“Company” means the Person named as the “Company” in the first paragraph of this Indenture until a successor Person shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Company” shall mean such successor Person.

“Company Request” or “Company Order” means a written request or order signed in the name of the Company by an Officer of the Company (or any Person designated in writing by an Officer of the Company as authorized to execute and deliver Company Requests and Company Orders), and delivered to the Trustee.

“Corporate Trust Office” means the principal office of the Trustee at which, at any particular time, its corporate trust business shall be conducted (which office is located as of the date of this Indenture at [Name of Trustee], [Address of Trustee], or at any other time at such other address as the Trustee may designate from time to time by notice to the Holders).

“Covenant Defeasance” has the meaning specified in Section 13.3.

“Custodian” has the meaning specified in Section 5.1.

“Default” means any event which is, or after notice or passage of time or both would be, an Event of Default.

“Defaulted Interest” has the meaning specified in Section 3.7.

“Defeasance” has the meaning specified in Section 13.2.

“Depository” means, with respect to Securities of any series issuable in whole or in part in the form of one or more Global Securities, a clearing agency registered under the Exchange Act that is designated to act as Depository for such Securities as contemplated by Section 3.1.

“Event of Default” has the meaning specified in Section 5.1.

“Exchange Act” means the U.S. Securities Exchange Act of 1934 and any statute successor thereto, in each case as amended from time to time.

“Expiration Date” has the meaning specified in Section 1.4.

“GAAP” means generally accepted accounting principles in the United States as in effect from time to time.

“Global Security” means a Security that evidences all or part of the Securities of any series and bears the legend set forth in Section 202 (or such legend as may be specified as contemplated by Section 3.1 for such Securities).

“Holder” means a Person in whose name a Security is registered in the Security Register.

“Indenture” means this instrument as originally executed and as it may from time to time be supplemented or amended by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof, including, for all purposes of this instrument and any such supplemental indenture, the provisions of the Trust Indenture Act that are deemed to be a part of and govern this instrument and any such supplemental indenture, respectively. The term “Indenture” shall also include the terms of particular series of Securities established as contemplated by Section 3.1.

“interest” means, when used with respect to an Original Issue Discount Security which by its terms bears interest only after Maturity, interest payable after Maturity.

“Interest Payment Date” means, when used with respect to any Security, the Stated Maturity of an installment of interest on such Security.

“Internal Revenue Code” means the U.S. Internal Revenue Code of 1986, as amended from time to time.

“Maturity” means, when used with respect to any Security, the date on which the principal of such Security or an installment of principal becomes due and payable as therein or herein provided, whether at the Stated Maturity or by declaration of acceleration, call for redemption or otherwise.

“Notice of Default” means a written notice of the kind specified in Section 5.1.

“Officer” means the Chief Executive Officer, the Chief Financial Officer, the President, any Vice President, the Treasurer and the Secretary, of the Company.

“Officer’s Certificate” means a certificate signed by an Officer of the Company (or any Person designated in writing by an Officer of the Company as authorized to execute and deliver Officer’s Certificates) and delivered to the Trustee.

“Opinion of Counsel” means a written opinion of counsel (who may be counsel for the Company) and which shall be reasonably acceptable to the Trustee. The counsel may be an employee of the Company. Opinions of Counsel required to be delivered under this Indenture may have qualifications customary for opinions of the type required.

“Original Issue Discount Security” means any Security which provides for an amount less than the principal amount thereof to be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 5.2.

“Outstanding” means, when used with respect to Securities, as of the date of determination, all Securities theretofore authenticated and delivered under this Indenture, except:

- (1) Securities theretofore cancelled by the Trustee or delivered to the Trustee for cancellation;
- (2) Securities for whose payment or redemption money in the necessary amount has been theretofore deposited with the Trustee or any Paying Agent (other than the Company) in trust or set aside and segregated in trust by the Company (if the Company shall act as its own Paying Agent) for the Holders of such Securities; provided that, if such Securities are to be redeemed, notice of such redemption has been duly given pursuant to this Indenture or provision therefor satisfactory to the Trustee has been made;
- (3) Securities as to which Defeasance has been effected pursuant to Section 13.2;
- (4) Securities which have been paid pursuant to Section 3.6 or in exchange for or in lieu of which other Securities have been authenticated and delivered pursuant to this Indenture, other than any such Securities in respect of which there shall have been presented to the Trustee proof satisfactory to it that such Securities are held by a *bona fide* purchaser in whose hands such Securities are valid obligations of the Company; and
- (5) Securities as to which any property deliverable upon conversion thereof has been delivered (or such delivery has been made available), or as to which any other particular conditions have been satisfied, in each case as may be provided for such Securities as contemplated in Section 3.1;

provided, however, that in determining whether the Holders of the requisite principal amount of the Outstanding Securities have given, made or taken any request, demand, authorization, direction, notice, consent, waiver or other action hereunder as of any date, (A) the principal amount of an Original Issue Discount Security which shall be deemed to be Outstanding shall be the amount of the principal thereof which would be due and payable as of such date upon acceleration of the Maturity thereof to such date pursuant to Section 5.2, (B) if, as of such date, the principal amount payable at the Stated Maturity of a Security is not determinable, the principal amount of such Security which shall be deemed to be Outstanding shall be the amount as specified or determined as contemplated by Section 3.1, (C) the principal amount of a Security denominated in one or more foreign currencies, composite currencies or currency units which shall be deemed to be Outstanding shall be the U.S. dollar equivalent, determined as of such date in the manner provided as contemplated by Section 3.1, of the principal amount of such Security (or, in the case of a Security described in clause (A) or (B) above, of the amount determined as provided in such clause), and (D) Securities owned by the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor shall be disregarded and deemed not to be Outstanding, except that, in determining whether the Trustee shall be protected in relying upon any such request, demand, authorization, direction, notice, consent, waiver or other action, only Securities which a Responsible Officer of the Trustee knows to be so owned shall be so disregarded. Securities so owned which have been pledged in good faith may be regarded as Outstanding if the pledgee establishes to the satisfaction of the Trustee the pledgee’s right so to act with respect to such Securities and that the pledgee is not the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor.

“Paying Agent” means any Person authorized by the Company to pay the principal of or premium, if any, or interest on any Securities on behalf of the Company. The Company initially authorizes and appoints the Trustee as the Paying Agent for each series of the Securities.

“Person” means any individual, corporation, partnership, limited liability company, joint venture, association, joint-stock company, trust, unincorporated organization or government or any agency or political subdivision thereof or any other entity.

“Place of Payment” means, when used with respect to the Securities of any series, the place or places where the principal of and premium, if any, and interest on the Securities of such series are payable as specified as contemplated by Section 3.1.

“Predecessor Security” means, with respect to any particular Security, every previous Security evidencing all or a portion of the same debt as that evidenced by such particular Security; and, for the purposes of this definition, any Security authenticated and delivered under Section 3.6 in exchange for or in lieu of a mutilated, destroyed, lost or stolen Security shall be deemed to evidence the same debt as the mutilated, destroyed, lost or stolen Security.

“Redemption Date” means, when used with respect to any Security to be redeemed, the date fixed for such redemption by or pursuant to this Indenture.

“Redemption Price” means, when used with respect to any Security to be redeemed, the price at which it is to be redeemed pursuant to this Indenture.

“Regular Record Date” means, for the interest payable on any Interest Payment Date on the Securities of any series, the date specified for that purpose as contemplated by Section 3.1.

“Repayment Date” means, with used with respect to a Security to be repaid at the option of a Holder, the date fixed for such repayment by or pursuant to this Indenture.

“Responsible Officer” means, when used with respect to the Trustee, any officer within the corporate trust department of the Trustee, including any vice president, assistant secretary, senior associate, associate, trust officer, or any other officer associated with the corporate trust department of the Trustee customarily performing functions similar to those performed by any of the above designated officers who shall have direct responsibility for the administration of this Indenture and also means, with respect to a particular corporate trust matter, any other officer to whom such matter is referred because of such person’s knowledge of and familiarity with the particular subject.

“Securities” has the meaning specified in the first recital of this Indenture and more particularly means any Securities authenticated and delivered under this Indenture.

“Securities Act” means the U.S. Securities Act of 1933 and any statute successor thereto, in each case as amended from time to time.

“Security Register” and “Security Registrar” have the respective meanings specified in Section 3.5.

“Special Record Date” means, for the payment of any Defaulted Interest, a date fixed by the Trustee pursuant to Section 3.7.

“Stated Maturity” means, when used with respect to any Security or any installment of principal thereof or interest thereon, the date specified in such Security as the fixed date on which the principal of such Security or such installment of principal or interest is due and payable.

“Subsidiary” means a corporation more than 50% of the outstanding voting stock of which is owned, directly or indirectly, by the Company or by one or more other Subsidiaries, or by the Company and one or more other Subsidiaries. For purposes of this definition, “voting stock” means stock which ordinarily has voting power for the election of directors, whether at all times or only so long as no senior class of stock has such voting power by reason of any contingency.

“Successor” has the meaning specified in Section 8.1 .

“Trust Indenture Act” means the U.S. Trust Indenture Act of 1939 as in force at the date as of which this Indenture was executed; provided, however, that in the event the Trust Indenture Act of 1939 is amended after such date, “Trust Indenture Act” means, to the extent required by any such amendment, the Trust Indenture Act of 1939 as so amended.

“Trustee” means the Person named as the “Trustee” in the first paragraph of this Indenture until a successor Trustee shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Trustee” shall mean or include each Person who is then a Trustee hereunder, and if at any time there is more than one such Person, “Trustee” as used with respect to the Securities of any series shall mean the Trustee with respect to Securities of that series.

“U.S. Government Obligation” has the meaning specified in Section 13.4(1).

“Vice President” means, when used with respect to the Company or the Trustee, any vice president, whether or not designated by a number or a word or words added before or after the title “vice president.”

## **1.2 Compliance Certificates and Opinions.**

Upon any application or request by the Company to the Trustee to take any action under any provision of this Indenture, the Company shall furnish to the Trustee an Officer’s Certificate stating that all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with and an Opinion of Counsel stating that in the opinion of such counsel all such conditions precedent, if any, have been complied with, except that in the case of any such application or request as to which the furnishing of such documents is specifically required by any provision of this Indenture relating to such particular application or request, no additional certificate or opinion need be furnished by the Company.

Every certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture (except for certificates provided for in Section 10.4) shall include:

- (1) a statement that each individual signing such certificate or opinion has read such covenant or
- (2) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;
- (3) a statement that, in the opinion of each such individual, he or she has made such examination or investigation as is necessary to enable him or her to express an informed opinion as to whether or not such covenant or condition has been complied with; and
- (4) a statement as to whether, in the opinion of each such individual, such condition or covenant has been complied with.

## **1.3 Form of Documents Delivered to Trustee.**

In any case where several matters are required to be certified by, or covered by an opinion of, any specified Person, it is not necessary that all such matters be certified by, or covered by the opinion of, only one such Person, or that they be so certified or covered by only one document, but one such Person may certify or give an opinion with respect to some matters and one or more other such Persons as to other matters, and any such Person may certify or give an opinion as to such matters in one or several documents.

Any certificate or opinion of an Officer (or any Person designated in writing by an Officer of the Company as authorized to execute and deliver the Securities) may be based, insofar as it relates to legal matters, upon a certificate or opinion of, or representations by, counsel, unless such Officer (or any such Person designated in writing by an Officer of the Company as authorized to execute and deliver the Securities) knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to the matters upon which such Officer's (or such Person's) certificate or opinion is based are erroneous. Any such certificate or Opinion of Counsel may be based, insofar as it relates to factual matters, upon a certificate or opinion of, or representations by, an Officer or Officers of the Company (or any Person or Persons designated in writing by an Officer of the Company as authorized to execute and deliver the Securities) stating that the information with respect to such factual matters is in the possession of the Company, unless such counsel knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to such matters are erroneous. Counsel delivering an Opinion of Counsel may also rely as to factual matters on certificates of governmental or other officials customary for opinions of the type required.

Where any Person is required to make, give or execute two or more applications, requests, consents, certificates, statements, opinions or other instruments under this Indenture, they may, but need not, be consolidated and form one instrument.

#### **1.4 Acts of Holders; Record Dates.**

Any request, demand, authorization, direction, notice, consent, waiver or other action provided or permitted by this Indenture to be given, made or taken by Holders may be embodied in and evidenced by one or more instruments of substantially similar tenor signed by such Holders in person or by an agent duly appointed in writing; and, except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments are delivered to the Trustee and, where it is hereby expressly required, to the Company. Such instrument or instruments (and the action embodied therein and evidenced thereby) are herein sometimes referred to as the "Act" of the Holders signing such instrument or instruments. Proof of execution of any such instrument or of a writing appointing any such agent shall be sufficient for any purpose of this Indenture and, subject to Section 6.1, conclusive in favor of the Trustee and the Company, if made in the manner provided in this Section 1.4.

The fact and date of the execution by any Person of any such instrument or writing may be proved in any manner which the Trustee reasonably deems sufficient. Where such execution is by a Person acting in a capacity other than such Person's individual capacity, such certificate or affidavit shall also constitute sufficient proof of such Person's authority. The fact and date of the execution of any such instrument or writing, or the authority of the Person executing the same, may also be proved in any other manner which the Trustee deems sufficient.

The ownership of Securities shall be proved by the Security Register.

Any request, demand, authorization, direction, notice, consent, waiver or other Act of the Holder of any Security shall bind every future Holder of the same Security and the Holder of every Security issued upon the registration of transfer thereof or in exchange therefor or in lieu thereof in respect of anything done, omitted or suffered to be done by the Trustee or the Company in reliance thereon, whether or not notation of such action is made upon such Security.

The Company may set any day as a record date for the purpose of determining the Holders of Outstanding Securities of any series entitled to give, make or take any request, demand, authorization, direction, notice, consent, waiver or other action provided or permitted by this Indenture to be given, made or taken by Holders of Securities of such series; provided that the Company may not set a record date for, and the provisions of this paragraph shall not apply with respect to, the giving or making of any notice, declaration, request or direction referred to in the next paragraph. If any record date is set pursuant to this paragraph, the Holders of Outstanding Securities of the relevant series on such record date, and no other Holders, shall be entitled to take the relevant action, whether or not such Holders remain Holders after such record date; provided that no such action shall be effective hereunder unless taken on or prior to the applicable Expiration Date by Holders of the requisite principal amount of Outstanding Securities of such series on such record date. Nothing in this paragraph shall be construed to prevent the Company from setting a new record date for any action for which a record date has previously been set pursuant to this paragraph (whereupon the record date previously set shall automatically and with no action by any Person be cancelled and of no effect), and nothing in this paragraph shall be construed to render ineffective any action taken by Holders of the requisite principal amount of Outstanding Securities of the relevant series on the date such action is taken. Promptly after any record date is set pursuant to this paragraph, the Company, at its own expense, shall cause notice of such record date, the proposed action by Holders and the applicable Expiration Date to be given to the Trustee in writing and to each Holder of Securities of the relevant series in the manner set forth in Sections 1.5 and 1.6.

The Trustee may set any day as a record date for the purpose of determining the Holders of Outstanding Securities of any series entitled to join in the giving or making of (i) any Notice of Default, (ii) any declaration of acceleration referred to in Section 5.2, (iii) any request to institute proceedings referred to in Section 5.7(2) or (iv) any direction referred to in Section 5.11, in each case with respect to Securities of such series. If any record date is set pursuant to this paragraph, the Holders of Outstanding Securities of such series on such record date, and no other Holders, shall be entitled to join in such notice, declaration, request or direction, whether or not such Holders remain Holders after such record date; provided that no such action shall be effective hereunder unless taken on or prior to the applicable Expiration Date by Holders of the requisite principal amount of Outstanding Securities of such series on such record date. Nothing in this paragraph shall be construed to prevent the Trustee from setting a new record date for any action for which a record date has previously been set pursuant to this paragraph (whereupon the record date previously set shall automatically and with no action by any Person be cancelled and of no effect), and nothing in this paragraph shall be construed to render ineffective any action taken by Holders of the requisite principal amount of Outstanding Securities of the relevant series on the date such action is taken. Promptly after any record date is set pursuant to this paragraph, the Trustee, at the Company's expense, shall cause notice of such record date, the proposed action by Holders and the applicable Expiration Date to be given to the Company in writing and to each Holder of Securities of the relevant series in the manner set forth in Sections 1.5 and 1.6.

With respect to any record date set pursuant to this Section 1.4, the party hereto which sets such record dates may designate any day as the "Expiration Date" and from time to time may change the Expiration Date to any earlier or later day; provided that no such change shall be effective unless notice of the proposed new Expiration Date is given to the other party hereto in writing, and to each Holder of Securities of the relevant series in the manner set forth in Section 1.6, on or prior to the existing Expiration Date. If an Expiration Date is not designated with respect to any record date set pursuant to this Section 1.4, the party hereto which set such record date shall be deemed to have initially designated the 180th day after such record date as the Expiration Date with respect thereto, subject to its right to change the Expiration Date as provided in this paragraph.

Without limiting the foregoing, a Holder entitled hereunder to take any action hereunder with regard to any particular Security may do so with regard to all or any part of the principal amount of such Security or by one or more duly appointed agents each of which may do so pursuant to such appointment with regard to all or any part of such principal amount.

#### **1.5 Notices, Etc., to Trustee and Company.**

Any request, demand, authorization, direction, notice, consent, waiver or Act of Holders or other document provided or permitted by this Indenture to be made upon, given or furnished to, or filed with,

(1) the Trustee by any Holder or by the Company shall be sufficient for every purpose hereunder if made, given, furnished or filed in writing (which may be by facsimile) to or with the Trustee at its Corporate Trust Office at the location specified in Section 1.1; or

(2) the Company by the Trustee or by any Holder shall be sufficient for every purpose hereunder (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to the Company addressed to the attention of the Secretary of the Company at the address of the Company's principal office specified in writing to the Trustee by the Company and, until further notice, at 22ND CENTURY GROUP, INC. 8560 Main Street, Suite 4, Williamsville, New York 14221, fax number: ( ) \_\_\_\_\_, Attention: \_\_\_\_\_.

In addition to the foregoing, the Trustee agrees to accept and act upon notice, instructions or directions pursuant to this Indenture sent by unsecured e-mail, facsimile transmission or other similar unsecured electronic methods. If the party elects to give the Trustee e-mail or facsimile instructions (or instructions by a similar electronic method) and the Trustee in its discretion elects to act upon such instructions, the Trustee's understanding of such instructions shall be deemed controlling. The Trustee shall not be liable for any losses, costs or expenses arising directly or indirectly from the Trustee's reliance upon and compliance with such instructions notwithstanding such instructions conflict or are inconsistent with a subsequent written instruction. The party providing electronic instructions agrees to assume all risks arising out of the use of such electronic methods to submit instructions and directions to the Trustee, including without limitation the risk of the Trustee acting on unauthorized instructions, and the risk of interception and misuse by third parties.

#### **1.6 Notice to Holders; Waiver.**

Where this Indenture provides for notice to Holders of any event, such notice shall be sufficiently given (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to each Holder affected by such event, at such Holder's address as it appears in the Security Register, not later than the latest date, if any, and not earlier than the earliest date, if any, prescribed for the giving of such notice. In any case where notice to Holders is given by mail, neither the failure to mail such notice, nor any defect in any notice so mailed, to any particular Holder shall affect the sufficiency of such notice with respect to other Holders. Any notice when mailed to a Holder in the aforesaid manner shall be conclusively deemed to have been received by such Holder whether or not actually received by such Holder. Where this Indenture provides for notice in any manner, such notice may be waived in writing by the Person entitled to receive such notice, either before or after the event, and such waiver shall be the equivalent of such notice. Waivers of notice by Holders shall be filed with the Trustee, but such filing shall not be a condition precedent to the validity of any action taken in reliance upon such waiver.

In case by reason of the suspension of regular mail service or by reason of any other cause it shall be impracticable to give such notice by mail, then such notification as shall be made with the approval of the Trustee shall constitute a sufficient notification for every purpose hereunder.

Where this Indenture provides for notice of any event to a Holder of a Global Security, such notice shall be sufficiently given if given to the Depository for such Security (or its designee), pursuant to the Applicable Procedures of the Depository, not later than the latest date, if any, and not earlier than the earliest date, if any, prescribed for the giving of such notice.

#### **1.7 Conflict with Trust Indenture Act.**

If any provision of this Indenture limits, qualifies or conflicts with a provision of the Trust Indenture Act which is required under such Act to be a part of and govern this Indenture, the latter provision shall control. If any provision of this Indenture modifies or excludes any provision of the Trust Indenture Act which may be so modified or excluded, the latter provision shall be deemed to apply to this Indenture as so modified or to be excluded, as the case may be.

#### **1.8 Effect of Headings and Table of Contents.**

The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

#### **1.9 Successors and Assigns.**

All covenants and agreements in this Indenture by the Company shall bind its successors and assigns, whether so expressed or not. All agreements of the Trustee in this Indenture shall bind its successors and assigns, whether so expressed or not.

#### **1.10 Separability Clause.**

In case any provision in this Indenture or in the Securities shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

**1.11 Benefits of Indenture.**

Nothing in this Indenture or in the Securities, express or implied, shall give to any Person, other than the parties hereto and their successors hereunder and the Holders, any benefit or any legal or equitable right, remedy or claim under this Indenture.

**1.12 Governing Law.**

This Indenture and the Securities shall be governed by, and construed in accordance with, the law of the State of New York.

**1.13 Legal Holidays.**

In any case where any Interest Payment Date, Redemption Date, Repayment Date or Stated Maturity of any Security, or any date on which a Holder has the right to convert such Holder's Security, shall not be a Business Day at any Place of Payment, then (notwithstanding any other provision of this Indenture or of the Securities (other than a provision of any Security which specifically states that such provision shall apply in lieu of this Section 1.13)) payment of principal and premium, if any, or interest, or the Redemption Price or conversion of such Security, shall not be made at such Place of Payment on such date, but shall be made on the next succeeding Business Day at such Place of Payment with the same force and effect as if made on the Interest Payment Date, Redemption Date or Repayment Date, or at the Stated Maturity, or on such conversion date. No interest shall accrue for the period from and after any such Interest Payment Date, Redemption Date, Repayment Date, Stated Maturity or conversion date, as the case may be, to the date of such payment.

**1.14 No Recourse Against Others.**

No recourse shall be had for the payment of principal of, or premium, if any, or interest, if any, on any Security of any series, or for any claim based thereon, or upon any obligation, covenant or agreement of this Indenture, against any incorporator, shareholder, officer or director, as such, past, present or future, of the Company or any successor corporation of the Company, either directly or indirectly through the Company or any successor corporation of the Company, whether by virtue of any constitution, statute or rule of law or by the enforcement of any assessment of penalty or otherwise; it being expressly agreed and understood that this Indenture and all the Securities of each series are solely corporate obligations, and that no personal liability whatsoever shall attach to, or be incurred by, any incorporator, shareholder, officer or director, past, present or future, of the Company or of any successor corporation of the Company, either directly or indirectly through the Company or any successor corporation of the Company, because of the incurring of the indebtedness hereby authorized or under or by reason of any of the obligations, covenants or agreements contained in this Indenture or in any of the Securities of any series, or to be implied herefrom or therefrom; and that all such personal liability is hereby expressly released and waived as a condition of, and as part of the consideration for, the execution of this Indenture and the issuance of the Securities of each series.

**1.15 WAIVER OF JURY TRIAL.**

EACH OF THE COMPANY AND THE TRUSTEE HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING AS BETWEEN THE COMPANY AND THE TRUSTEE ONLY ARISING OUT OF OR RELATING TO THIS INDENTURE OR THE SECURITIES.

**1.16 Submission to Jurisdiction.**

The Company hereby irrevocably submits to the jurisdiction of any New York State court sitting in the Borough of Manhattan in the City of New York or any federal court sitting in the Borough of Manhattan in the City of New York in respect of any suit, action or proceeding arising out of or relating to this Indenture and the Securities, and irrevocably accepts for itself and in respect of its property, generally and unconditionally, jurisdiction of the aforesaid courts.

**ARTICLE II  
SECURITY FORMS**

**2.1 Forms Generally.**

The Securities of each series shall be in substantially such form or forms as shall be established by or pursuant to a Board Resolution or, subject to Section 3.3, set forth in, or determined in the manner provided in, an Officer's Certificate pursuant to a Board Resolution, or in one or more indentures supplemental hereto, in each case with such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture, and may have such letters, numbers or other marks of identification and such legends or endorsements placed thereon as may be required to comply with applicable tax laws or the rules of any securities exchange or Depository therefor or as may, consistently herewith, be determined by the Officer (or any Person designated in writing by an Officer of the Company as authorized to execute and deliver the Securities) executing such Securities, as evidenced by his or her execution thereof. If the form of Securities of any series is established by action taken pursuant to a Board Resolution, a copy of an appropriate record of such action shall be certified by the Secretary or an Assistant Secretary of the Company and delivered to the Trustee at or prior to the delivery of the Company Order contemplated by Section 3.3 for the authentication and delivery of such Securities. If all of the Securities of any series established by action taken pursuant to a Board Resolution are not to be issued at one time, it shall not be necessary to deliver a record of such action at the time of issuance of each Security of such series, but an appropriate record of such action shall be delivered at or before the time of issuance of the first Security of such series.

The definitive Securities shall be printed, lithographed or engraved or may be produced in any other manner, all as determined by the Officer (or any Person designated in writing by an Officer of the Company as authorized to execute and deliver the Securities) executing such Securities, as evidenced by his or her execution of such Securities.

**2.2 Form of Legend for Global Securities.**

Unless otherwise specified as contemplated by Section 3.1 for the Securities evidenced thereby or as required by Applicable Procedures, every Global Security authenticated and delivered hereunder shall bear a legend in substantially the following form:

*[Insert, if applicable — UNLESS THIS NOTE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY, A NEW YORK CORPORATION (“DTC”), TO THE ISSUER OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC (AND ANY PAYMENT IS MADE TO CEDE & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN.*

TRANSFERS OF THIS GLOBAL SECURITY SHALL BE LIMITED TO TRANSFERS IN WHOLE, BUT NOT IN PART, TO NOMINEES OF DTC OR TO A SUCCESSOR THEREOF OR SUCH SUCCESSOR'S NOMINEE AND TRANSFERS OF PORTIONS OF THIS GLOBAL SECURITY SHALL BE LIMITED TO TRANSFERS MADE IN ACCORDANCE WITH THE RESTRICTIONS SET FORTH IN THE INDENTURE REFERRED TO ON THE REVERSE HEREOF.]

*[Insert, if applicable — THIS SECURITY IS A GLOBAL SECURITY WITHIN THE MEANING OF THE INDENTURE REFERRED TO HEREIN AND IS REGISTERED IN THE NAME OF A DEPOSITARY OR A NOMINEE THEREOF. THIS SECURITY MAY NOT BE EXCHANGED IN WHOLE OR IN PART FOR A SECURITY REGISTERED, AND NO TRANSFER OF THIS SECURITY IN WHOLE OR IN PART MAY BE REGISTERED, IN THE NAME OF ANY PERSON OTHER THAN SUCH DEPOSITARY OR A NOMINEE THEREOF, EXCEPT IN THE LIMITED CIRCUMSTANCES DESCRIBED IN THE INDENTURE.]*

**2.3 Form of Trustee's Certificate of Authentication.**

The Trustee's certificates of authentication shall be in substantially the following form:

This is one of the Securities of the series designated therein referred to in the within-mentioned Indenture.

Dated:

[Name of Trustee],  
as Trustee

By: \_\_\_\_\_  
Authorized Signatory

**ARTICLE III  
THE SECURITIES**

**3.1 Amount Unlimited; Issuable in Series.**

The aggregate principal amount of Securities which may be authenticated and delivered under this Indenture is unlimited.

The Securities may be issued in one or more series. There shall be established in or pursuant to (a) a Board Resolution or pursuant to authority granted by a Board Resolution and, subject to Section 3.3, set forth, or determined in the manner provided, in an Officer's Certificate, or (b) one or more indentures supplemental hereto, prior to the issuance of Securities of any series:

- (1) the title of the Securities of the series (which shall distinguish the Securities of the series from Securities of any other series);
- (2) the limit, if any, on the aggregate principal amount of the Securities of the series which may be authenticated and delivered under this Indenture (except for Securities authenticated and delivered upon registration of transfer of, or in exchange for, or in lieu of, other Securities of the series pursuant to Section 3.4, Section 3.5, Section 3.6, Section 9.6, Section 11.7 or Section 14.5 and except for any Securities which, pursuant to Section 3.3, are deemed never to have been authenticated and delivered hereunder); provided, however, that the authorized aggregate principal amount of such series may from time to time be increased above such amount by a Board Resolution to such effect;
- (3) the price or prices at which the Securities will be sold;
- (4) the Person to whom any interest on a Security of the series shall be payable, if other than the Person in whose name that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest;
- (5) the date or dates on which the principal and premium, if any, of any Securities of the series is payable or the method used to determine or extend those dates;

(6) the rate or rates at which any Securities of the series shall bear interest, if any, or the method by which such rate or rates shall be determined, the date or dates from which any such interest shall accrue, or the method by which such date or dates shall be determined, the Interest Payment Dates on which any such interest shall be payable and the Regular Record Date, if any, for any such interest payable on any Interest Payment Date, or the method by which such date or dates shall be determined, and the basis upon which interest shall be calculated if other than that of a 360-day year of twelve 30-day months, the right, if any, to extend or defer interest payments and the duration of

(7) the place or places where the principal of and any premium and interest on any Securities of the series shall be payable, the place or places where the Securities of such series may be presented for registration of transfer or exchange, the place or places where notices and demands to or upon the Company in respect of the Securities of such series may be made and the manner in which any payment may be made;

(8) the period or periods within which or the date or dates on which, the price or prices at which, the currency or currency units in which, and the terms and conditions upon which any Securities of the series may be redeemed, in whole or in part, at the option of the Company and, if other than by a Board Resolution, the manner in which any election by the Company to redeem the Securities shall be evidenced;

(9) the obligation or the right, if any, of the Company to redeem or purchase any Securities of the series pursuant to any sinking fund, amortization or analogous provisions or at the option of the Holder thereof and the period or periods within which, the price or prices at which, the currency or currency units in which, and the terms and conditions upon which any Securities of the series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;

(10) if other than denominations of \$2,000 and any integral multiple of \$1,000 in excess thereof, the denominations in which any Securities of the series shall be issuable;

(11) if other than the Trustee, the identity of each Security Registrar and/or Paying Agent;

(12) if the amount of principal of or premium, if any, or interest on any Securities of the series may be determined with reference to a financial or economic measure or index or pursuant to a formula, the manner in which such amounts shall be determined;

(13) if other than the currency of the United States of America, the currency, currencies or currency units in which the principal of or premium, if any, or interest on any Securities of the series shall be payable and the manner of determining the equivalent thereof in the currency of the United States of America for any purpose, including for purposes of the definition of "Outstanding" in Section 1.1;

(14) if the principal of or premium, if any, or interest on any Securities of the series is to be payable, at the election of the Company or the Holder thereof, in one or more currencies or currency units other than that or those in which such Securities are stated to be payable, the currency, currencies or currency units in which the principal of or premium, if any, or interest on such Securities as to which such election is made shall be payable, the periods within which or the dates on which and the terms and conditions upon which such election is to be made and the amount so payable (or the manner in which such amount shall be determined);

(15) if the provisions of Section 4.1 relating to the satisfaction and discharge of this Indenture shall apply to the Securities of that series; or if provisions for the satisfaction and discharge of this Indenture other than as set forth in Section 4.1 shall apply to the Securities of that series;

(16) if other than the entire principal amount thereof, the portion of the principal amount of any Securities of the series which shall be payable upon declaration of acceleration of the Maturity thereof pursuant to Section 5.2 or the method by which such portion shall be determined;

(17) if the principal amount payable at the Stated Maturity of any Securities of the series will not be determinable as of any one or more dates prior to the Stated Maturity, the amount which shall be deemed to be the principal amount of such Securities as of any such date for any purpose thereunder or hereunder, including the principal amount thereof which shall be due and payable upon any Maturity other than the Stated Maturity or which shall be deemed to be Outstanding as of any date prior to the Stated Maturity (or, in any such case, the manner in which such amount deemed to be the principal amount shall be determined);

(18) if other than by a Board Resolution, the manner in which any election by the Company to defease any Securities of the series pursuant to Section 13.2 or Section 13.3 shall be evidenced; whether any Securities of the series other than Securities denominated in U.S. dollars and bearing interest at a fixed rate are to be subject to Section 13.2 or Section 13.3; or, in the case of Securities denominated in U.S. dollars and bearing interest at a fixed rate, if applicable, that the Securities of the series, in whole or any specified part, shall not be defeasible pursuant to Section 13.2 or Section 13.3 or both such Sections;

(19) if applicable, that any Securities of the series shall be issuable in whole or in part in the form of one or more Global Securities and, in such case, the respective Depositaries for such Global Securities, the form of any legend or legends which shall be borne by any such Global Security in addition to or in lieu of that set forth in Section 2.2 and any circumstances in addition to or in lieu of those set forth in clause (2) of the last paragraph of Section 3.5 in which any such Global Security may be exchanged in whole or in part for Securities registered, and any transfer of such Global Security in whole or in part may be registered, in the name or names of Persons other than the Depositary for such Global Security or a nominee thereof;

(20) any addition to, deletion from or change in the Events of Default which applies to any Securities of the series and any change in the right of the Trustee or the requisite Holders of such Securities to declare the principal amount thereof due and payable pursuant to Section 5.2;

(21) any addition to, deletion from or change in the covenants set forth in Article X which applies to Securities of the series;

(22) the terms of any right to convert or exchange Securities of such series into any other securities or property of the Company or of any other corporation or Person, and the additions or changes, if any, to this Indenture with respect to the Securities of such series to permit or facilitate such conversion or exchange;

(23) whether the Securities of the series will be guaranteed by any Person or Persons and, if so, the identity of such Person or Persons, the terms and conditions upon which such Securities shall be guaranteed and, if applicable, the terms and conditions upon which such guarantees may be subordinated to other indebtedness of the respective guarantors;

(24) whether the Securities of the series will be secured by any collateral and, if so, the terms and conditions upon which such Securities shall be secured and, if applicable, upon which such liens may be subordinated to other liens securing other indebtedness of the Company or any guarantor;

(25) whether the Securities will be issued in a transaction registered under the Securities Act and any restriction or condition on the transferability of the Securities of such series;

(26) the exchanges, if any, on which the Securities may be listed; and

(27) any other terms of the series (which terms shall not be inconsistent with the provisions of this Indenture, except as permitted by Section 9.1).

All Securities of any one series shall be substantially identical except as to denomination and except as may otherwise be provided in or pursuant to the Board Resolution referred to above or pursuant to authority granted by one or more Board Resolutions and, subject to Section 3.3, set forth, or determined in the manner provided, in the Officer's Certificate referred to above or in any such indenture supplemental hereto. All Securities of any one series need not be issued at one time and, unless otherwise provided in or pursuant to the Board Resolution referred to above and, subject to Section 3.3, set forth, or determined in the manner provided, in the Officer's Certificate referred to above or pursuant to authority granted by one or more Board Resolutions or in any such indenture supplemental hereto with respect to a series of Securities, additional Securities of a series may be issued, at the option of the Company, without the consent of any Holder, at any time and from time to time.

If any of the terms of the series are established by action taken pursuant to a Board Resolution, a copy of an appropriate record of such action shall be certified by the Secretary or an Assistant Secretary of the Company and delivered to the Trustee at or prior to the delivery of the Officer's Certificate setting forth the terms of the series.

### **3.2 Denominations.**

The Securities of each series shall be issuable only in registered form without coupons and only in such denominations as shall be specified as contemplated by Section 3.1. In the absence of any such specified denomination with respect to the Securities of any series, the Securities of such series shall be issuable in denominations of \$2,000 and any integral multiple of \$1,000 in excess thereof.

### **3.3 Execution, Authentication, Delivery and Dating.**

The Securities shall be executed on behalf of the Company by an Officer of the Company (or any Person designated in writing by an Officer of the Company as authorized to execute and deliver the Securities). The signature of any of these officers on the Securities may be manual or facsimile.

Securities bearing the manual or facsimile signatures of individuals who were at any time the proper officers of the Company shall bind the Company, notwithstanding that such individuals or any of them have ceased to hold such offices prior to the authentication and delivery of such Securities or did not hold such offices at the date of such Securities.

At any time and from time to time after the execution and delivery of this Indenture, the Company may deliver Securities of any series executed by the Company to the Trustee for authentication, together with an Officer's Certificate and a Company Order for the authentication and delivery of such Securities, and the Trustee in accordance with the Company Order shall authenticate and deliver such Securities. If the form or terms of the Securities of the series have been established by or pursuant to one or more Board Resolutions or pursuant to authority granted by one or more Board Resolutions as permitted by Section 2.1 and Section 3.1, in authenticating such Securities, and accepting the additional responsibilities under this Indenture in relation to such Securities, the Trustee shall be provided with, and, subject to Section 6.1, shall be fully protected in relying upon, an Opinion of Counsel stating,

(1) if the form of such Securities has been established by or pursuant to Board Resolution or pursuant to authority granted by one or more Board Resolutions as permitted by Section 2.1, that such form has been established in conformity with the provisions of this Indenture;

(2) that such Securities, when authenticated by the Trustee and issued and delivered by the Company in the manner and subject to any conditions specified in such Opinion of Counsel, will constitute valid and legally binding obligations of the Company enforceable in accordance with their terms, subject to (i) the effects of bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other similar laws relating to or affecting creditors' rights generally, (ii) general equitable principles and (iii) an implied covenant of good faith and fair dealing.

If such form or terms have been so established, the Trustee shall not be required to authenticate such Securities if the issue of such Securities pursuant to this Indenture will materially adversely affect the Trustee's own rights, duties or immunities under the Securities and this Indenture or otherwise in a manner which is not reasonably acceptable to the Trustee.

Notwithstanding the provisions of Section 3.1 and of the preceding paragraph of this Section 3.3, if all Securities of a series are not to be originally issued at one time, including in the event that the aggregate principal amount of a series of Outstanding Securities is increased as contemplated by Section 301, it shall not be necessary to deliver the Officer's Certificate, Board Resolution or supplemental indenture otherwise required pursuant to Section 3.1 or the Company Order and Opinion of Counsel otherwise required pursuant to this Section 3.3 at or prior to the authentication of each Security of such series if such documents are delivered at or prior to the authentication upon original issuance of the first Security of such series to be issued.

Each Security shall be dated the date of its authentication.

No Security shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Security a certificate of authentication substantially in the form provided for herein executed by the Trustee by manual signature, and such certificate upon any Security shall be conclusive evidence, and the only evidence, that such Security has been duly authenticated and delivered hereunder. Notwithstanding the foregoing, if any Security shall have been authenticated and delivered hereunder but never issued and sold by the Company, and the Company shall deliver such Security to the Trustee for cancellation as provided in Section 3.9, for all purposes of this Indenture such Security shall be deemed never to have been authenticated and delivered hereunder and shall never be entitled to the benefits of this Indenture.

### **3.4 Temporary Securities.**

Pending the preparation of definitive Securities of any series, the Company may execute, and, upon Company Order, the Trustee shall authenticate and deliver, temporary Securities which are printed, lithographed, typewritten, mimeographed or otherwise produced, in any authorized denomination, substantially of the tenor of the definitive Securities of such series in lieu of which they are issued and with such appropriate insertions, omissions, substitutions and other variations as the officers executing such Securities may determine, as evidenced by their execution of such Securities.

If temporary Securities of any series are issued, the Company will cause definitive Securities of such series to be prepared without unreasonable delay. After the preparation of definitive Securities of such series, the temporary Securities of such series shall be exchangeable for definitive Securities of such series upon surrender of the temporary Securities of such series at the office or agency of the Company in a Place of Payment for such series, without charge to the Holder. Upon surrender for cancellation of any one or more temporary Securities of any series, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor one or more definitive Securities of the same series, of any authorized denominations and of like tenor and aggregate principal amount. Until so exchanged, the temporary Securities of any series shall in all respects be entitled to the same benefits under this Indenture as definitive Securities of such series and tenor.

### **3.5 Registration, Registration of Transfer and Exchange.**

The Company shall cause to be kept at the Corporate Trust Office of the Trustee a register (the register maintained in such office and in any other office or agency of the Company in a Place of Payment being herein sometimes collectively referred to as the "Security Register") in which, subject to such reasonable regulations as it may prescribe, the Company shall provide for the registration of Securities and of transfers of Securities. The Trustee is hereby appointed "Security Registrar" for the purpose of registering Securities and transfers of Securities as herein provided.

Upon surrender for registration of transfer of any Security of a series at the office or agency of the Company in a Place of Payment for such series, the Company shall execute, and the Trustee shall authenticate and deliver, in the name of the designated transferee or transferees, one or more new Securities of the same series, of any authorized denominations and of like tenor and principal amount.

At the option of the Holder, Securities of any series may be exchanged for other Securities of the same series, of any authorized denominations and of like tenor and principal amount, upon surrender of the Securities to be exchanged at such office or agency. Whenever any Securities are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Securities which the Holder making the exchange is entitled to receive.

All Securities issued upon any registration of transfer or exchange of Securities shall be the valid obligations of the Company, evidencing the same debt, and entitled to the same benefits under this Indenture, as the Securities surrendered upon such registration of transfer or exchange.

Every Security presented or surrendered for registration of transfer or for exchange shall (if so required by the Company or the Trustee) be duly endorsed, or be accompanied by a written instrument of transfer in form satisfactory to the Company and the Security Registrar duly executed, by the Holder thereof or such Holder's attorney duly authorized in writing.

No service charge shall be made for any registration of transfer or exchange of Securities, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any registration of transfer or exchange of Securities, other than exchanges pursuant to Section 3.4, Section 9.6, Section 11.7 or Section 14.5 not involving any transfer.

If the Securities of any series (or of any series and specified tenor) are to be redeemed in part, the Company shall not be required (A) to issue, register the transfer of or exchange any Securities of such series (or of such series and specified tenor, as the case may be) during a period beginning at the opening of business 15 days before the day of the mailing of a notice of redemption of any such Securities selected for redemption under Section 11.3 and ending at the close of business on the day of such mailing, or (B) to register the transfer of or exchange any Security so selected for redemption, in whole or in part, except the unredeemed portion of any Security being redeemed in part.

The provisions of clauses (1), (2), (3) and (4) of this paragraph shall apply only to Global Securities:

(1) Each Global Security authenticated under this Indenture shall be registered in the name of the Depositary designated for such Global Security or a nominee thereof and delivered to such Depositary or a nominee thereof or custodian therefor, and each such Global Security shall constitute a single Security for all purposes of this Indenture.

(2) Notwithstanding any other provision in this Indenture, and subject to such applicable provisions, if any, as may be specified as contemplated by Section 3.1, no Global Security may be exchanged in whole or in part for Securities registered, and no transfer of a Global Security in whole or in part may be registered, in the name of any Person other than the Depositary for such Global Security or a nominee thereof unless (A) such Depositary has notified the Company that it is unwilling or unable or no longer permitted under applicable law to continue as Depositary for such Global Security, (B) there shall have occurred and be continuing an Event of Default with respect to such Global Security, (C) the Company so directs the Trustee by a Company Order or (D) there shall exist such circumstances, if any, in addition to or in lieu of the foregoing as have been specified for this purpose as contemplated by Section 3.1.

(3) Subject to clause (2) above, and subject to such applicable provisions, if any, as may be specified as contemplated by Section 3.1, any exchange of a Global Security for other Securities may be made in whole or in part, and all Securities issued in exchange for a Global Security or any portion thereof shall be registered in such names as the Depositary for such Global Security shall direct.

(4) Every Security authenticated and delivered upon registration of transfer of, or in exchange for or in lieu of, a Global Security or any portion thereof, whether pursuant to this Section 3.4, Section 3.5, Section 3.6, Section 9.6, Section 11.7 or Section 14.5 or otherwise, shall be authenticated and delivered in the form of, and shall be, a Global Security, unless such Security is registered in the name of a Person other than the Depositary for such Global Security or a nominee thereof.

The Trustee shall have no obligation or duty to monitor, determine or inquire as to compliance with any restrictions on transfer imposed under this Indenture or under applicable law with respect to any transfer of any interest in any Security (including any transfers between or among Depositary participants or beneficial owners of interests in any Global Security) other than to require delivery of such certificates and other documentation or evidence as are expressly required by, and to do so if and when expressly required by the terms of, this Indenture, and to examine the same to determine substantial compliance as to form with the express requirements hereof.

Neither the Trustee nor any agent of the Trustee shall have any responsibility for any actions taken or not taken by the Depositary.

### 3.6 Mutilated, Destroyed, Lost and Stolen Securities.

If any mutilated Security is surrendered to the Trustee, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a new Security of the same series and of like tenor and principal amount and bearing a number not contemporaneously outstanding and shall cancel and dispose of such mutilated security in accordance with its customary procedures.

If there shall be delivered to the Company and the Trustee (1) evidence to their satisfaction of the destruction, loss or theft of any Security and (2) such security or indemnity as may be required by them to save each of them and any agent of either of them harmless, then, in the absence of notice to the Company or the Trustee that such Security has been acquired by a *bona fide* purchaser, the Company shall execute and the Trustee shall authenticate and deliver, in lieu of any such destroyed, lost or stolen Security, a new Security of the same series and of like tenor and principal amount and bearing a number not contemporaneously outstanding.

In case any such mutilated, destroyed, lost or stolen Security has become or is about to become due and payable, the Company in its discretion may, instead of issuing a new Security, pay such Security.

Upon the issuance of any new Security under this Section 3.6, the Company may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the fees and expenses of counsel to the Company and the fees and expenses of the Trustee and its counsel) connected therewith.

Every new Security of any series issued pursuant to this Section 3.6 in lieu of any mutilated, destroyed, lost or stolen Security shall constitute an original additional contractual obligation of the Company, whether or not the mutilated, destroyed, lost or stolen Security shall be at any time enforceable by anyone, and shall be entitled to all the benefits of this Indenture equally and proportionately with any and all other Securities of such series duly issued hereunder.

The provisions of this Section 3.6 are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities.

### 3.7 Payment of Interest; Interest Rights Preserved.

Except as otherwise provided as contemplated by Section 3.1 with respect to any series of Securities, interest on any Security which is payable, and is punctually paid or duly provided for, on any Interest Payment Date shall be paid to the Person in whose name that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest.

Any interest on any Security of any series which is payable, but is not punctually paid or duly provided for, on any Interest Payment Date (herein called Defaulted Interest) shall forthwith cease to be payable to the Holder on the relevant Regular Record Date by virtue of having been such Holder, and such Defaulted Interest may be paid by the Company, at its election in each case, as provided in clause (1) or (2) below:

(1) The Company may elect to make payment of any Defaulted Interest payable on Securities of a series to the Persons in whose names the Securities of such series (or their respective Predecessor Securities) are registered at the close of business on a Special Record Date for the payment of such Defaulted Interest, which shall be fixed in the following manner. The Company shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each Security of such series and the date of the proposed payment, and at the same time the Company shall deposit with the Trustee an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the Persons entitled to such Defaulted Interest as in this clause provided. Thereupon the Trustee in consultation with the Company shall fix a Special Record Date for the payment of such Defaulted Interest which shall be not more than 15 days and not less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. The Trustee shall promptly notify the Company of such Special Record Date and, in the name and at the expense of the Company, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be given to each Holder of Securities of such series in the manner set forth in Section 1.6, not less than 10 days prior to such Special Record Date. Notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor having been so mailed, such Defaulted Interest shall be paid to the Persons in whose names the Securities of such series (or their respective Predecessor Securities) are registered at the close of business on such Special Record Date and shall no longer be payable pursuant to the following clause (b).

(2) The Company may make payment of any Defaulted Interest on the Securities of any series in any other lawful manner not inconsistent with the requirements of any securities exchange on which such Securities may be listed, and upon such notice as may be required by such exchange, if, after notice given by the Company to the Trustee of the proposed payment pursuant to this clause, such manner of payment shall be deemed practicable by the Trustee.

Subject to the foregoing provisions of this Section 3.7, each Security delivered under this Indenture upon registration of transfer of or in exchange for or in lieu of any other Security shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Security.

In the case of any Security which is converted after any Regular Record Date and on or prior to the next succeeding Interest Payment Date (other than any Security whose Maturity is prior to such Interest Payment Date), interest whose Stated Maturity is on such Interest Payment Date shall be payable on such Interest Payment Date notwithstanding such conversion, and such interest (whether or not punctually paid or made available for payment) shall be paid to the Person in whose name that Security (or one or more Predecessor Securities) is registered at the close of business on such Regular Record Date. Except as otherwise expressly provided in the immediately preceding sentence, in the case of any Security which is converted, interest whose Stated Maturity is after the date of conversion of such Security shall not be payable. Notwithstanding the foregoing, the terms of any Security that may be converted may provide that the provisions of this paragraph do not apply, or apply with such additions, changes or omissions as may be provided thereby, to such Security.

### **3.8 Persons Deemed Owners.**

Prior to due presentment of a Security for registration of transfer, the Company, the Trustee and any agent of the Company or the Trustee may treat the Person in whose name such Security is registered as the owner of such Security for the purpose of receiving payment of principal of and premium, if any, and, subject to Section 3.7, any interest on such Security and for all other purposes whatsoever, whether or not such Security be overdue, and neither the Company, the Trustee nor any agent of the Company or the Trustee shall be affected by notice to the contrary.

### **3.9 Cancellation.**

All Securities surrendered for payment, redemption, registration of transfer or exchange or conversion or for credit against any sinking fund payment shall, if surrendered to any Person other than the Trustee, be delivered to the Trustee and shall be promptly cancelled by it. The Company may at any time deliver to the Trustee for cancellation any Securities previously authenticated and delivered hereunder which the Company may have acquired in any manner whatsoever, and may deliver to the Trustee (or to any other Person for delivery to the Trustee) for cancellation any Securities previously authenticated hereunder which the Company has not issued and sold, and all Securities so delivered shall be promptly cancelled by the Trustee. No Securities shall be authenticated in lieu of or in exchange for any Securities cancelled as provided in this Section 3.9, except as expressly permitted by this Indenture. All cancelled Securities held by the Trustee shall be disposed of in accordance with its customary procedures. The Trustee shall provide the Company a list of all Securities that have been cancelled from time to time as requested by the Company.

### **3.10 Computation of Interest.**

Except as otherwise specified as contemplated by Section 3.1 for Securities of any series, interest on the Securities of each series shall be computed on the basis of a 360-day year of twelve 30-day months.

### **3.11 CUSIP Numbers.**

The Company in issuing any series of the Securities may use "CUSIP" or "ISIN" numbers and/or other similar numbers, if then generally in use, and thereafter with respect to such series, the Trustee may use such numbers in any notice of redemption with respect to such series; provided that any such notice may state that no representation is made as to the correctness of such numbers either as printed on the Securities of such series or as contained in any notice of a redemption and that reliance may be placed only on the other identification numbers printed on the Securities of such series, and any such redemption shall not be affected by any defect in or omission of such numbers.

### **3.12 Original Issue Discount.**

If any of the Securities is an Original Issue Discount Security, the Company shall file with the Trustee promptly at the end of each calendar year (1) a written notice specifying the amount of original issue discount (including daily rates and accrual periods) accrued on such Outstanding Original Issue Discount Securities as of the end of such year and (2) such other specific information relating to such original issue discount as may then be relevant under the Internal Revenue Code.

**ARTICLE IV**  
**SATISFACTION AND DISCHARGE**

**4.1 Satisfaction and Discharge of Indenture.**

This Indenture shall, upon Company Request, cease to be of further effect with respect to any series of Securities specified in such Company Request (except as to any surviving rights of registration of transfer or exchange of Securities of such series herein expressly provided for), and the Trustee, at the expense of the Company, shall execute proper instruments acknowledging satisfaction and discharge of this Indenture as to such series, when:

(1) either

(A) all Securities of such series theretofore authenticated and delivered (other than (i) Securities which have been mutilated, destroyed, lost or stolen and which have been replaced or paid as provided in Section 3.6 and (ii) Securities for whose payment money has theretofore been deposited in trust or segregated and held in trust by the Company and thereafter repaid to the Company or discharged from such trust, as provided in Section 10.3) have been delivered to the Trustee for cancellation; or

(B) all such Securities of such series not theretofore delivered to the Trustee for cancellation

(i) have become due and payable, or

(ii) will become due and payable at their Stated Maturity within one year of the date of deposit, or

(iii) are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of the Company,

and the Company, in the case of (i), (ii) or (iii) above, has deposited or caused to be deposited with the Trustee as trust funds in trust for such purpose money in an amount sufficient to pay and discharge the entire indebtedness on such Securities not theretofore delivered to the Trustee for cancellation, for principal and premium, if any, and interest to the date of such deposit (in the case of Securities which have become due and payable) or to the Stated Maturity or Redemption Date, as the case may be;

(2) the Company has paid or caused to be paid all other sums payable hereunder by the Company; and

(3) the Company has delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture as to such series have been complied with.

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee under Section 6.7 and, if money shall have been deposited with the Trustee pursuant to subclause (B) of clause (1) of this Section 4.1, the obligations of the Trustee under Section 4.2 and the last paragraph of Section 10.3 shall survive such satisfaction and discharge.

## 4.2 Application of Trust Money.

Subject to the provisions of the last paragraph of Section 10.3, all money deposited with the Trustee pursuant to Section 4.1 shall be held in trust and applied by it, in accordance with the provisions of the applicable series of Securities and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Persons entitled thereto, of the principal and premium, if any, and interest for whose payment such money has been deposited with the Trustee. All money deposited with the Trustee pursuant to Section 4.1 (and held by it or any Paying Agent) for the payment of Securities subsequently converted into other property shall be returned to the Company upon Company Request. The Company may direct by a Company Order the investment of any money deposited with the Trustee pursuant to Section 4.1, without distinction between principal and income, in (1) United States Treasury securities with a maturity of one year or less or (2) a money market fund that invests solely in short-term United States Treasury securities (including money market funds for which the Trustee or an affiliate of the Trustee serves as investment advisor, administrator, shareholder, servicing agent and/or custodian or sub-custodian, notwithstanding that (a) the Trustee charges and collects fees and expenses from such funds for services rendered and (b) the Trustee charges and collects fees and expenses for services rendered pursuant to this Indenture at any time) and from time to time the Company may direct the reinvestment of all or a portion of such money in other securities or funds meeting the criteria specified in clause (1) or (2) of this Section 4.2.

## ARTICLE V REMEDIES

### 5.1 Events of Default.

Except as may be otherwise provided pursuant to Section 3.1 for Securities of any series, an “Event of Default” means, whenever used herein or in a Security issued hereunder with respect to Securities of any series, any one of the following events (whatever the reason for such Event of Default and whether it shall be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body):

- (1) the Company defaults in the payment of any installment of interest on any Security of such series for 30 days after becoming due;
- (2) the Company defaults in the payment of the principal of or premium, if any, on any Security of such series when the same becomes due and payable at its Stated Maturity, upon optional redemption, upon declaration or otherwise;
- (3) the Company defaults in the performance of, or breaches any of its covenants and agreements in respect of any Security of such series contained in this Indenture or in the Securities of such series (other than a covenant or agreement, a default in the performance of which or a breach of which is elsewhere in this Section specifically dealt with or that has expressly been included in this Indenture solely for the benefit of a series of Securities other than that series), and such default or breach continues for a period of 90 days after the notice specified below;
- (4) the Company, pursuant to or within the meaning of the Bankruptcy Law (as defined below):
  - (A) commences a voluntary case or proceeding;
  - (B) consents to the entry of an order for relief against it in an involuntary case or proceeding;
  - (C) consents to the appointment of a Custodian (as defined below) of it or for all or substantially all of its property;
  - (D) makes a general assignment for the benefit of its creditors;
  - (E) files a petition in bankruptcy or answer or consent seeking reorganization or relief;

- (F) consents to the filing of such petition or the appointment of or taking possession by a Custodian; or
  - (G) takes any comparable action under any foreign laws relating to insolvency;
  - (5) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:
    - (A) is for relief against the Company in an involuntary case, or adjudicates the Company insolvent or bankrupt;
    - (B) appoints a Custodian of the Company or for all or substantially all of the property of the Company; or
    - (C) orders the winding-up or liquidation of the Company (or any similar relief is granted under any foreign laws)
- and the order or decree remains unstayed and in effect for 90 days; or
- (6) any other Event of Default provided with respect to Securities of such series occurs.

The term "Bankruptcy Law" means Title 11, United States Code, or any similar federal or state or foreign law for the relief of debtors. The term "Custodian" means any custodian, receiver, trustee, assignee, liquidator or other similar official under any Bankruptcy Law.

A Default with respect to Securities of any series under clause (3) of this Section 5.1 shall not be an Event of Default until the Trustee (by written notice to the Company) or the Holders of at least 25% in aggregate principal amount of the outstanding Securities of such series (by written notice to the Company and the Trustee) gives notice of the Default and the Company does not cure such Default within the time specified in clause (3) after receipt of such notice. Such notice must specify the Default, demand that it be remedied and state that such notice is a "Notice of Default."

## **5.2 Acceleration of Maturity; Rescission and Annulment.**

If an Event of Default with respect to Securities of any series at the time Outstanding (other than an Event of Default specified in Section 5.1(4) or (5) with respect to the Company) occurs and is continuing, then in every such case the Trustee or the Holders of not less than 25% in aggregate principal amount of the Outstanding Securities of such series may declare the principal amount of all the Securities of such series (or, if any Securities of that series are Original Issue Discount Securities, such portion of the principal amount of such Securities as may be specified by the terms thereof), together with any accrued and unpaid interest thereon, to be due and payable immediately, by a notice in writing to the Company (and to the Trustee if given by Holders), and upon any such declaration, such principal amount (or specified amount), together with any accrued and unpaid interest thereon, shall become immediately due and payable. If an Event of Default specified in Section 5.1(4) or (5) with respect to the Securities of any series at the time Outstanding occurs, the principal amount of all the Securities of such series (or, in the case of any Security of such series which specifies an amount to be due and payable thereon upon acceleration of the Maturity thereof, such amount as may be specified by the terms thereof), together with any accrued and unpaid interest thereon, shall automatically, and without any declaration or other action on the part of the Trustee or any Holder, become immediately due and payable. Upon payment of such amount, all obligations of the Company in respect of the payment of principal and interest of the Securities of such series shall terminate.

Except as may otherwise be provided pursuant to Section 3.1 for all or any specific Securities of any series, at any time after such a declaration of acceleration with respect to the Securities of any series has been made and before a judgment or decree for payment of the money due has been obtained by the Trustee as hereinafter in this Article V provided, the Holders of a majority in aggregate principal amount of the Outstanding Securities of such series, by written notice to the Company and the Trustee, may rescind and annul such declaration and its consequences if:

- (1) the Company has paid or deposited with the Trustee a sum sufficient to pay:
  - (A) all overdue interest on all Securities of such series,
  - (B) the principal of and premium, if any, on any Securities of such series which have become due otherwise than by such declaration of acceleration and any interest thereon at the rate or rates prescribed therefor in the Securities of such series,
  - (C) to the extent that payment of such interest is lawful, interest upon overdue interest at the rate or rates prescribed therefor in such Securities, and
  - (D) all sums paid or advanced by the Trustee hereunder and the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel; and
- (2) all Events of Default with respect to Securities of such series, other than the non-payment of the principal of Securities of such series which have become due solely by such declaration of acceleration, have been cured or waived as provided in Section 5.12.

No such rescission shall affect any subsequent default or impair any right consequent thereon.

### **5.3 Collection of Indebtedness and Suits for Enforcement by Trustee.**

The Company covenants that if (1) default is made in the payment of any interest on any Security when such interest becomes due and payable and such default continues for a period of 30 days or (2) default is made in the payment of the principal of or premium, if any, on any Security at the Maturity thereof, the Company will, upon demand of the Trustee, pay to it, for the benefit of the Holders of such Securities, the whole amount then due and payable on such Securities for principal and premium, if any, and interest and, to the extent that payment of such interest shall be legally enforceable, interest on any overdue principal and premium and on any overdue interest, at the rate or rates prescribed therefor in such Securities, and, in addition thereto, such further amount as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

If an Event of Default with respect to Securities of any series occurs and is continuing, the Trustee may in its discretion proceed to protect and enforce its rights and the rights of the Holders of Securities of such series by such appropriate judicial proceedings as the Trustee shall deem necessary to protect and enforce any such rights, whether for the specific enforcement of any covenant or agreement in this Indenture or in aid of the exercise of any power granted herein, or to enforce any other proper remedy.

#### **5.4 Trustee May File Proofs of Claim.**

In case of any judicial proceeding relative to the Company (or any other obligor upon the Securities), its property or its creditors, the Trustee shall be entitled and empowered, by intervention in such proceeding or otherwise, to take any and all actions authorized under the Trust Indenture Act in order to have claims of the Holders and the Trustee allowed in any such proceeding. In particular, the Trustee shall be authorized to collect and receive any moneys or other property payable or deliverable on any such claims and to distribute the same; and any custodian, receiver, assignee, trustee, liquidator, sequestrator or other similar official in any such judicial proceeding is hereby authorized by each Holder to make such payments to the Trustee and, in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due it and any predecessor Trustee under Section 6.7.

No provision of this Indenture shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder any plan of reorganization, arrangement, adjustment or composition affecting the Securities or the rights of any Holder thereof or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding; provided, however, that the Trustee may, on behalf of the Holders, vote for the election of a trustee in bankruptcy or similar official and be a member of a creditors' or other similar committee.

#### **5.5 Trustee May Enforce Claims Without Possession of Securities.**

All rights of action and claims under this Indenture or the Securities may be prosecuted and enforced by the Trustee without the possession of any of the Securities or the production thereof in any proceeding relating thereto, and any such proceeding instituted by the Trustee shall be brought in its own name as trustee of an express trust, and any recovery of judgment shall, after provision for the payment of the reasonable compensation, expenses, disbursements and advances of the Trustee, any predecessor Trustee under Section 6.7, its agents and counsel, be for the ratable benefit of the Holders of the Securities in respect of which such judgment has been recovered.

#### **5.6 Application of Money Collected.**

Any money collected by the Trustee pursuant to this Article V shall be applied in the following order, at the date or dates fixed by the Trustee and, in case of the distribution of such money on account of principal or premium, if any, or interest, upon presentation of the Securities and the notation thereon of the payment if only partially paid and upon surrender thereof if fully paid:

FIRST: To the payment of all amounts due the Trustee under Section 6.7;

SECOND: To the payment of the amounts then due and unpaid for principal of and premium, if any, and interest on the Securities in respect of which or for the benefit of which such money has been collected, ratably, without preference or priority of any kind (other than contractual subordination agreements pursuant to the Indenture), according to the amounts due and payable on such Securities for principal and premium, if any, and interest, respectively; and

THIRD: To the payment of the remainder, if any, to the Company.

#### **5.7 Limitation on Suits.**

No Holder of any Security of any series shall have any right to institute any proceeding, judicial or otherwise, with respect to this Indenture, or for the appointment of a receiver, assignee, trustee, liquidator or sequestrator (or similar official) or for any other remedy hereunder, unless:

- (1) Such Holder has previously given written notice to the Trustee of a continuing Event of Default with respect to the Securities of such series;
- (2) the Holders of not less than 25% in aggregate principal amount of the Outstanding Securities of such series shall have made written request to the Trustee to institute proceedings in respect of such Event of Default in its own name as Trustee hereunder;
- (3) such Holder or Holders have offered to the Trustee indemnity reasonably satisfactory to it against the costs, expenses and liabilities to be incurred in compliance with such request;

(4) the Trustee has failed to institute any such proceeding for 60 days after its receipt of such notice, request and offer of indemnity; and

(5) no direction inconsistent with such written request has been given to the Trustee during such 60-day period by the Holders of a majority in aggregate principal amount of the Outstanding Securities of such series;

it being understood and intended that no one or more of such Holders shall have any right in any manner whatever by virtue of, or by availing of, any provision of this Indenture to affect, disturb or prejudice the rights of any other of such Holders, or to obtain or to seek to obtain priority or preference over any other of such Holders (it being understood that the Trustee does not have an affirmative duty to ascertain whether or not such actions are unduly prejudicial to such Holders) or to enforce any right under this Indenture, except in the manner herein provided and for the equal and ratable benefit of all of such Holders.

#### **5.8 Unconditional Right of Holders to Receive Principal, Premium and Interest and to Convert Securities.**

Notwithstanding any other provision in this Indenture, the Holder of any Security shall have the right, which is absolute and unconditional, to receive payment of the principal of and premium, if any, and, subject to Section 3.7, interest on such Security on the respective Stated Maturities expressed in such Security (or, in the case of redemption or repayment, on the Redemption Date or date for repayment, as the case may be, and, if the terms of such Security so provide, to convert such Security in accordance with its terms) and to institute suit for the enforcement of any such payment and, if applicable, any such right to convert, and such rights shall not be impaired without the consent of such Holder.

#### **5.9 Rights and Remedies Cumulative.**

Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities in the last paragraph of Section 3.6, no right or remedy herein conferred upon or reserved to the Trustee or to the Holders is intended to be exclusive of any other right or remedy, and every right and remedy shall, to the extent permitted by law, be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other appropriate right or remedy.

#### **5.10 Delay or Omission Not Waiver.**

No delay or omission of the Trustee or of any Holder of any Securities to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of any such Event of Default or an acquiescence therein. Every right and remedy given by this Article V or by law to the Trustee or to the Holders may be exercised from time to time, and as often as may be deemed expedient, by the Trustee or by the Holders, as the case may be.

#### **5.11 Control by Holders.**

The Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of any series shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred on the Trustee, with respect to the Securities of such series; provided that

(1) such direction shall not be in conflict with any rule of law or with this Indenture, and

(2) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction.

**5.12 Waiver of Past Defaults.**

The Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of any series may on behalf of the Holders of all the Securities of such series waive any past default hereunder with respect to such series and its consequences, except a default

- (1) in the payment of the principal or premium, if any, or interest on any Security of such series, or
- (2) in respect of a covenant or provision hereof which under Article IX cannot be modified or amended without the consent of the Holder of each Outstanding Security of such series affected.

Upon any such waiver, such default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured, for every purpose of this Indenture, but no such waiver shall extend to any subsequent or other default or impair any right consequent thereon.

**5.13 Undertaking for Costs.**

In any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Trustee for any action taken, suffered or omitted by it as Trustee, a court may require any party litigant in such suit to file an undertaking to pay the costs of such suit, and may assess reasonable costs against any such party litigant, in the manner and to the extent provided in the Trust Indenture Act; provided that neither this Section 5.13 nor the Trust Indenture Act shall be deemed to authorize any court to require such an undertaking or to make such an assessment in any suit instituted by the Company or the Trustee, a suit by a Holder under Section 5.8, or a suit by Holders of more than 10% in aggregate principal amount of the Outstanding Securities.

**5.14 Waiver of Usury, Stay or Extension Laws.**

The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any usury, stay or extension law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of this Indenture; and the Company (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

**5.15 Restoration of Rights and Remedies.**

If the Trustee or any Holder has instituted any proceeding to enforce any right or remedy under this Indenture and such proceeding has been discontinued or abandoned for any reason, or has been determined adversely to the Trustee or to such Holder, then and in every such case, subject to any determination in such proceeding, the Company, the Trustee and the Holders shall be restored severally and respectively to their former positions hereunder and thereafter all rights and remedies of the Trustee and the Holders shall continue as though no such proceeding had been instituted.

**ARTICLE VI  
THE TRUSTEE**

**6.1 Certain Duties and Responsibilities of Trustee.**

- (1) Except during the continuance of an Event of Default with respect to any series of Securities,
  - (A) the Trustee undertakes to perform such duties and only such duties as are specifically set forth in this Indenture with respect to the Securities of such series, and no implied covenants or obligations shall be read into this Indenture against the Trustee with respect to such series; and

(B) in the absence of bad faith on its part, the Trustee may rely with respect to the Securities of such series, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but in the case of any such certificates or opinions which by any provision hereof are specifically required to be furnished to the Trustee, the Trustee shall be under a duty to examine the same to determine whether or not they conform to the requirements of this Indenture (but need not confirm or investigate the accuracy of mathematical calculations or other facts stated therein).

(2) In case an Event of Default with respect to any series of Securities has occurred and is continuing, the Trustee shall exercise such of the rights and powers vested in it by this Indenture with respect to the Securities of such series, and use the same degree of care and skill in their exercise, as a prudent person would exercise or use under the circumstances in the conduct of his or her own affairs.

(3) No provision of this Indenture shall be construed to relieve the Trustee from liability for its own negligent action, its own negligent failure to act, or its own willful misconduct, except that:

(A) this Section 6.1(3) shall not be construed to limit the effect of Section 6.1(1);

(B) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer, unless it shall be proved that the Trustee was negligent in ascertaining the pertinent facts;

(C) the Trustee shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the Holders of a majority in aggregate principal amount of the Outstanding Securities of any series, determined as provided in Section 1.1, Section 1.4 and Section 5.11, relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, under this Indenture with respect to the Securities of such series; and

(D) no provision of this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder, or in the exercise of any of its rights or powers, if it shall have reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it.

(4) Whether or not therein expressly so provided, every provision of this Indenture relating to the conduct or affecting the liability of or affording protection to the Trustee shall be subject to the provisions of this Section 6.1.

## **6.2 Notice of Defaults.**

If a Default or an Event of Default occurs with respect to Securities of any series and is continuing and if it is actually known to the Trustee, the Trustee shall mail to each Holder of Securities of such series notice of the Default within 90 days after it is known to a Responsible Officer or written notice of it is received by a Responsible Officer of the Trustee. Except in the case of a Default in payment of principal of or interest on any Security, the Trustee may withhold the notice if and so long as a committee of its Responsible Officers in good faith determines that withholding the notice is not opposed to the interests of Holders of Securities of such series.

## **6.3 Certain Rights of Trustee.**

Subject to the provisions of Section 6.1:

(1) the Trustee may conclusively rely and shall be fully protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness or other paper or document believed by it to be genuine and to have been signed or presented by the proper party or parties;

(2) if so requested by the Trustee, any request or direction of the Company mentioned herein shall be sufficiently evidenced by a Company Request or Company Order, and any resolution of the Board of Directors shall be sufficiently evidenced by a Board Resolution;

(3) whenever in the administration of this Indenture the Trustee shall deem it desirable that a matter be proved or established prior to taking, suffering or omitting any action hereunder, the Trustee (unless other evidence be herein specifically prescribed) may, in the absence of bad faith on its part, conclusively rely upon an Officer's Certificate;

(4) the Trustee may consult with counsel of its selection and the advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon;

(5) the Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders pursuant to this Indenture, unless such Holders shall have offered to the Trustee security or indemnity reasonably satisfactory to it against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction;

(6) the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, other evidence of indebtedness or other paper or document, but the Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit, and, if the Trustee shall determine to make such further inquiry or investigation, it shall be entitled to examine the books, records and premises of the Company, personally or by agent or attorney at the sole cost of the Company and shall incur no liability or additional liability of any kind by reason of such inquiry or investigation;

(7) the Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys and the Trustee shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder;

(8) the rights, privileges, protections, immunities and benefits given to the Trustee, including, without limitation, its right to be indemnified, are extended to, and shall be enforceable by, the Trustee in each of its capacities hereunder and to its agents;

(9) the Trustee shall not be liable for any action taken, suffered, or omitted to be taken by it in good faith and reasonably believed by it to be authorized or within the discretion or rights or powers conferred upon it by this Indenture;

(10) in no event shall the Trustee be responsible or liable for special, indirect, or consequential loss or damage of any kind whatsoever (including, but not limited to, loss of profit) irrespective of whether the Trustee has been advised of the likelihood of such loss or damage and regardless of the form of action;

(11) in no event shall the Trustee be responsible or liable for any failure or delay in the performance of its obligations hereunder arising out of or caused by, directly or indirectly, forces beyond its control, including, without limitation, strikes, work stoppages, accidents, acts of war or terrorism, civil or military disturbances, nuclear or natural catastrophes or acts of God, and interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services (it being understood that the Trustee shall use reasonable efforts which are consistent with accepted practices in the banking industry to avoid and mitigate the effects of such occurrences and to resume performance as soon as practicable under the circumstances);

(12) the Trustee shall not be deemed to have notice of any Default or Event of Default unless a Responsible Officer of the Trustee shall have actual knowledge thereof or unless written notice of any event which is in fact such a default shall have been received by the Trustee at the Corporate Trust Office of the Trustee, and such notice references the Securities and this Indenture; and

(13) the Trustee may request that the Company deliver a certificate setting forth the names of individuals and/or titles of officers authorized at such time to take specified actions pursuant to this Indenture.

**6.4 Not Responsible for Recitals or Issuance of Securities.**

The recitals contained herein and in the Securities, except the Trustee's certificates of authentication, shall be taken as the statements of the Company, and the Trustee assumes no responsibility for their correctness. The Trustee makes no representations as to the validity or sufficiency of this Indenture or of the Securities. The Trustee shall not be accountable for the use or application by the Company of Securities or the proceeds thereof.

**6.5 May Hold Securities.**

The Trustee, any Paying Agent, any Security Registrar or any other agent of the Company, in its individual or any other capacity, may become the owner or pledgee of Securities and, subject to Section 6.8 and Section 6.13, may otherwise deal with the Company with the same rights it would have if it were not Trustee, Paying Agent, Security Registrar or such other agent.

**6.6 Money Held in Trust.**

Money held by the Trustee in trust hereunder shall, until used or applied as herein provided, be held in trust for the purposes for which they were received, but need not be segregated from other funds except to the extent required by law. The Trustee shall be under no liability for interest on any money received by it hereunder except as otherwise agreed with the Company.

**6.7 Compensation and Reimbursement.**

The Company agrees

(1) to pay to the Trustee from time to time such reasonable compensation as shall be agreed to in writing between the Company and the Trustee for all services rendered by it hereunder (which compensation shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust);

(2) except as otherwise expressly provided herein, to reimburse the Trustee upon its request for all reasonable expenses, disbursements and advances incurred or made by the Trustee in accordance with any provision of this Indenture (including the reasonable compensation and the reasonable expenses and disbursements of its agents and counsel), except any such expense, disbursement or advance as shall have been caused by its negligence or willful misconduct, and the Trustee shall provide the Company reasonable notice of any expenditure not in the ordinary course of business; and

(3) to indemnify the Trustee for, and to hold it harmless against, any loss, liability or expense incurred without negligence or willful misconduct on its part, arising out of or in connection with the acceptance or administration of the trust or trusts hereunder, including the reasonable costs and expenses of defending itself against any claim or liability in connection with the exercise or performance of any of its powers or duties hereunder.

The Trustee shall notify the Company promptly of any claim for which it may seek indemnity.

When the Trustee incurs expenses or renders services in connection with an Event of Default specified in Section 5.1(4) or (5), the expenses (including the reasonable charges and expenses of its counsel) and the compensation for the services are intended to constitute expenses of administration under any applicable federal or state bankruptcy, insolvency or other similar law.

The Trustee shall have a lien prior to the Securities as to all property and funds held by it hereunder for any amount owing it or any predecessor Trustee pursuant to this Section 6.7, except with respect to funds held in trust for the benefit of the Holders of Securities.

The provisions of this Section 6.7 shall survive the termination of this Indenture and the resignation or removal of the Trustee.

**6.8 Conflicting Interests.**

If the Trustee has or shall acquire a conflicting interest within the meaning of the Trust Indenture Act, the Trustee shall either eliminate such interest or resign, to the extent and in the manner provided by, and subject to the provisions of, the Trust Indenture Act and this Indenture.

To the extent permitted by the Trust Indenture Act, the Trustee shall not be deemed to have a conflicting interest by virtue of being a trustee under this Indenture with respect to Securities of more than one series.

**6.9 Corporate Trustee Required; Eligibility.**

There shall at all times be one (and only one) Trustee hereunder with respect to the Securities of each series, which may be Trustee hereunder for Securities of one or more other series. Each Trustee shall be a Person that is eligible pursuant to the Trust Indenture Act to act as such, has a combined capital and surplus of at least \$50,000,000 and has its Corporate Trust Office in the Borough of Manhattan, The City of New York or any other major city in the United States that is acceptable to the Company. If any such Person publishes reports of condition at least annually, pursuant to law or to the requirements of its supervising or examining authority, then for the purposes of this Section 6.9 and to the extent permitted by the Trust Indenture Act, the combined capital and surplus of such Person shall be deemed to be its combined capital and surplus as set forth in its most recent annual report of condition so published. If at any time the Trustee with respect to the Securities of any series shall cease to be eligible in accordance with the provisions of this Section 6.9, it shall resign immediately in the manner and with the effect hereinafter specified in this Article VI.

**6.10 Resignation and Removal; Appointment of Successor.**

No resignation or removal of the Trustee and no appointment of a successor Trustee pursuant to this Article VI shall become effective until the acceptance of appointment by the successor Trustee in accordance with the applicable requirements of Section 6.11.

The Trustee may resign at any time with respect to the Securities of one or more series by giving written notice thereof to the Company. If the instrument of acceptance by a successor Trustee required by Section 6.11 shall not have been delivered to the Trustee within 30 days after the giving of such notice of resignation, the resigning Trustee, at the expense of the Company, may petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

The Trustee may be removed at any time with respect to the Securities of any series by Act of the Holders of a majority in aggregate principal amount of the Outstanding Securities of such series, upon written notice delivered to the Trustee and to the Company. If the instrument of acceptance by a successor Trustee required by Section 6.11 shall not have been delivered to the Trustee within 30 days after the giving of such notice of removal, the Trustee being removed, at the expense of the Company, may petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

If at any time:

- (1) the Trustee shall fail to comply with Section 6.8 after written request therefor by the Company or by any Holder who has been *bona fide* Holder of a Security for at least six months, or
- (2) the Trustee shall cease to be eligible under Section 6.9 and shall fail to resign after written request therefor by the Company or by any such Holder, or

(3) the Trustee shall become incapable of acting or shall be adjudged bankrupt or insolvent or a receiver of the Trustee or of its property shall be appointed or any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation,

then, in any such case, (A) the Company may remove the Trustee with respect to all Securities or (B) subject to Section 5.13, Holders of 10% in aggregate principal amount of Securities of any series who have been *bona fide* Holders of such Securities for at least six months may, on behalf of themselves and all others similarly situated, petition any court of competent jurisdiction for the removal of the Trustee with respect to all Securities and the appointment of a successor Trustee or Trustees.

If the Trustee shall resign, be removed or become incapable of acting, or if a vacancy shall occur in the office of Trustee for any cause, with respect to the Securities of one or more series, the Company shall promptly appoint a successor Trustee or Trustees with respect to the Securities of that or those series (it being understood that any such successor Trustee may be appointed with respect to the Securities of one or more or all of such series and that at any time there shall be only one Trustee with respect to the Securities of any particular series) and shall comply with the applicable requirements of Section 6.11. If a successor Trustee with respect to the Securities of any series shall be appointed by Act of the Holders of a majority in aggregate principal amount of the Outstanding Securities of such series delivered to the Company and the retiring Trustee, the successor Trustee so appointed shall, forthwith upon its acceptance of such appointment in accordance with the applicable requirements of Section 6.11, become the successor Trustee with respect to the Securities of such series and to that extent supersede the successor Trustee appointed by the Company. If no successor Trustee with respect to the Securities of any series shall have been so appointed by the Company or the Holders and accepted appointment in the manner required by Section 6.11, Holders of 10% in aggregate principal amount of Securities of any series who have been *bona fide* Holders of Securities of such series for at least six months may, on behalf of themselves and all others similarly situated, petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

The Company shall give notice of each resignation and each removal of the Trustee with respect to the Securities of any series and each appointment of a successor Trustee with respect to the Securities of any series to all Holders of Securities of such series in the manner provided in Section 1.6. Each notice shall include the name of the successor Trustee with respect to the Securities of such series and the address of its Corporate Trust Office.

#### **6.11 Acceptance of Appointment by Successor.**

In case of the appointment hereunder of a successor Trustee with respect to all Securities, every such successor Trustee so appointed shall execute, acknowledge and deliver to the Company and to the retiring Trustee a written instrument accepting such appointment, and thereupon the resignation or removal of the retiring Trustee shall become effective and such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee, but, on the request of the Company or the successor Trustee, such retiring Trustee shall, upon payment of its charges, execute and deliver a written instrument transferring to such successor Trustee all the rights, powers and trusts of the retiring Trustee and shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder.

In case of the appointment hereunder of a successor Trustee with respect to the Securities of one or more (but not all) series, the Company, the retiring Trustee and each successor Trustee with respect to the Securities of one or more series shall execute and deliver an indenture supplemental hereto wherein each successor Trustee shall accept such appointment and which (1) shall contain such provisions as shall be necessary or desirable to transfer and confirm to, and to vest in, each successor Trustee all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates, (2) if the retiring Trustee is not retiring with respect to all Securities, shall contain such provisions as shall be deemed necessary or desirable to confirm that all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series as to which the retiring Trustee is not retiring shall continue to be vested in the retiring Trustee, and (3) shall add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, it being understood that nothing herein or in such supplemental indenture shall constitute such Trustees co-trustees of the same trust and that each such Trustee shall be trustee of a trust or trusts hereunder separate and apart from any trust or trusts hereunder administered by any other such Trustee; and upon the execution and delivery of such supplemental indenture the resignation or removal of the retiring Trustee shall become effective to the extent provided therein and each such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates; but, on request of the Company or any successor Trustee, such retiring Trustee shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder with respect to the Securities of that or those series to which the appointment of such successor Trustee relates.

Upon request of any such successor Trustee, the Company shall execute any and all instruments for more fully and certainly vesting in and confirming to such successor Trustee all such rights, powers and trusts referred to in the first or second preceding paragraph, as the case may be.

No successor Trustee shall accept its appointment unless at the time of such acceptance such successor Trustee shall be qualified and eligible under this Article VI.

**6.12 Merger, Conversion, Consolidation or Succession to Business.**

Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to all or substantially all the corporate trust business of the Trustee, shall be the successor of the Trustee hereunder; provided that such corporation shall be otherwise qualified and eligible under this Article VI, without the execution or filing of any paper or any further act on the part of any of the parties hereto. In case any Securities shall have been authenticated, but not delivered, by the Trustee then in office, any successor by merger, conversion, consolidation or sale to such authenticating Trustee may adopt such authentication and deliver the Securities so authenticated with the same effect as if such successor Trustee had itself authenticated such Securities; and in case at that time any Securities shall not have been authenticated, any successor to the Trustee may authenticate such Securities either in the name of any predecessor hereunder or in the name of the successor to the Trustee; and in all such cases such certificates shall have the full force which it is anywhere in the Securities or in this Indenture provided that the certificate of the Trustee shall have.

**6.13 Preferential Collection of Claims Against Company.**

If and when the Trustee shall be or become a creditor of the Company (or any other obligor upon the Securities), the Trustee shall be subject to the provisions of the Trust Indenture Act regarding the collection of claims against the Company (or any such other obligor)

**6.14 Appointment of Authenticating Agent.**

The Trustee may appoint an Authenticating Agent or Agents with respect to one or more series of Securities which shall be authorized to act on behalf of the Trustee to authenticate Securities of such series issued upon original issue and upon exchange, registration of transfer or partial redemption thereof or pursuant to Section 3.6, and Securities so authenticated shall be entitled to the benefits of this Indenture and shall be valid and obligatory for all purposes as if authenticated by the Trustee hereunder. Wherever reference is made in this Indenture to the authentication and delivery of Securities by the Trustee or the Trustee's certificate of authentication, such reference shall be deemed to include authentication and delivery on behalf of the Trustee by an Authenticating Agent and a certificate of authentication executed on behalf of the Trustee by an Authenticating Agent. Each Authenticating Agent shall be acceptable to the Company and shall at all times be a corporation organized and doing business under the laws of the United States of America, any state thereof or the District of Columbia, authorized under such laws to act as Authenticating Agent, having a combined capital and surplus of not less than \$50,000,000 and subject to supervision or examination by federal or state authority. If such Authenticating Agent publishes reports of condition at least annually, pursuant to law or to the requirements of said supervising or examining authority, then for the purposes of this Section 6.14, the combined capital and surplus of such Authenticating Agent shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. If at any time an Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section 6.14 such Authenticating Agent shall resign immediately in the manner and with the effect specified in this Section 6.14.

Any corporation into which an Authenticating Agent may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which such Authenticating Agent shall be a party, or any corporation succeeding to all or substantially all of the corporate agency or corporate trust business of an Authenticating Agent shall be the successor Authenticating Agent hereunder, provided such corporation shall be otherwise eligible under this Section 6.14, without the execution or filing of any paper or any further act on the part of the Trustee or the Authenticating Agent.

An Authenticating Agent may resign at any time by giving written notice thereof to the Trustee and to the Company. The Trustee may at any time terminate the agency of an Authenticating Agent by giving written notice thereof to such Authenticating Agent and to the Company. Upon receiving such a notice of resignation or upon such a termination, or in case at any time such Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section 6.14, the Trustee may appoint a successor Authenticating Agent which shall be acceptable to the Company and shall give notice of such appointment in the manner provided in Section 1.6 to all Holders of Securities of the series with respect to which such Authenticating Agent will serve. Any successor Authenticating Agent upon acceptance of its appointment hereunder shall become vested with all the rights, powers and duties of its predecessor hereunder, with like effect as if originally named as an Authenticating Agent. No successor Authenticating Agent shall be appointed unless eligible under the provisions of this Section 6.14.

The Company agrees to pay to each Authenticating Agent from time to time reasonable compensation for its services under this Section 6.14.

If an appointment with respect to one or more series is made pursuant to this Section 6.14, the Securities of such series may have endorsed thereon, in addition to the Trustee's certificate of authentication, an alternative certificate of authentication in the following form:

This is one of the Securities of the series designated therein referred to in the within-mentioned Indenture.

Dated: \_\_\_\_\_ [Name of Trustee],  
As Trustee

By: \_\_\_\_\_

As Authenticating Agent

By: \_\_\_\_\_  
Authorized Officer

**ARTICLE VII  
HOLDERS' LISTS AND REPORTS BY TRUSTEE  
AND COMPANY**

**7.1 Company to Furnish Trustee Names and Addresses of Holders.**

If the Trustee is not the Security Registrar, the Company shall cause the Security Registrar to furnish to the Trustee, in writing at least five Business Days before each Interest Payment Date and at such other times as the Trustee may request in writing, a list in such form and as of such date as the Trustee may reasonably require of the names and addresses of Holders of Securities of each series.

## **7.2 Preservation of Information; Communications to Holders.**

The Trustee shall preserve, in as current a form as is reasonably practicable, the names and addresses of Holders contained in the most recent list furnished to the Trustee as provided in Section 7.1 and the names and addresses of Holders received by the Trustee in its capacity as Security Registrar. The Trustee may destroy any list furnished to it as provided in Section 7.1 upon receipt of a new list so furnished.

The rights of Holders to communicate with other Holders with respect to their rights under this Indenture or under the Securities, and the corresponding rights and privileges of the Trustee, shall be as provided by the Trust Indenture Act.

Every Holder of Securities, by receiving and holding the same, agrees with the Company and the Trustee that neither the Company nor the Trustee nor any agent of either of them shall be held accountable by reason of any disclosure of information as to names and addresses of Holders made pursuant to the Trust Indenture Act.

## **7.3 Reports by Trustee.**

Within 60 days after each May 15, beginning in 2021, the Trustee shall transmit to Holders such reports concerning the Trustee and its actions under this Indenture as may be required pursuant to the Trust Indenture Act. The Trustee shall promptly deliver to the Company a copy of any report it delivers to Holders pursuant to this Section 7.3.

A copy of each such report shall, at the time of such transmission to Holders, be filed by the Trustee with each stock exchange and automated quotation system, if any, upon which any Securities are listed, with the Commission and with the Company. The Company will notify the Trustee when any Securities are listed on any stock exchange or automated quotation system or delisted therefrom.

## **7.4 Reports by Company.**

So long as the Securities of any series are outstanding, the Company shall:

(1) furnish to the Trustee, within 15 days after the Company files the same with the Commission, copies of the annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the Commission may from time to time by rules and regulations prescribe) which the Company files with the Commission pursuant to Section 13 or Section 15(d) of the Exchange Act; provided, however, that any such information, document or report filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval (or EDGAR) system or any successor thereto shall be deemed to be filed with the Trustee; provided, however, that the Trustee shall have no responsibility whatsoever to determine whether such filing has occurred; and

(2) comply with the other provisions of Section 314(a) of the Trust Indenture Act.

Provided that, the delivery of such reports, information and documents to the Trustee is for informational purposes only and the Trustee's receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Company's compliance with any of its covenants hereunder (as to which the Trustee is entitled to rely exclusively on Officer's Certificates).

**ARTICLE VIII  
CONSOLIDATION, MERGER  
AND SALE OF ASSETS**

**8.1 Company May Merge or Transfer Assets Only on Certain Terms.**

The Company shall not consolidate with or merge with or into, or sell, transfer, lease or convey all or substantially all of its properties and assets to, in one transaction or a series of related transactions, any other Person, unless:

- (1) the Company shall be the continuing entity, or the resulting, surviving or transferee Person (the "Successor") shall be a Person (if such Person is not a corporation, then the Successor shall include a corporate co-issuer of the Securities) organized and existing under the laws of the United States of America, any State thereof or the District of Columbia and the Successor (if not the Company) shall expressly assume, by an indenture supplemental hereto, executed and delivered to the Trustee, in form reasonably satisfactory to the Trustee, all the obligations of the Company under the Securities and this Indenture and, for each Security that by its terms provides for conversion, shall have provided for the right to convert such Security in accordance with its terms;
- (2) immediately after giving effect to such transaction, no Default or Event of Default shall have occurred and be continuing; and
- (3) the Company shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that such transaction and such supplemental indenture, if any, complies with this Indenture (except that such Opinion of Counsel need not opine as to clause (2) above).

**8.2 Successor Corporation Substituted.**

The Successor shall succeed to, and be substituted for, and may exercise every right and power of, the Company under the Indenture, with the same effect as if the Successor had been an original party to this Indenture, and the Company shall be released from all its liabilities and obligations under this Indenture and the Securities.

**ARTICLE IX  
SUPPLEMENTAL INDENTURES**

**9.1 Supplemental Indentures Without Consent of Holders.**

Without the consent of any Holders, the Company and the Trustee, at any time and from time to time, may enter into one or more indentures supplemental hereto, in form satisfactory to the Trustee, for any of the following purposes:

- (1) to add to the covenants for the benefit of the Holders of all or any series of Securities (and if such covenants are to be for the benefit of less than all series of Securities, stating that such covenants are expressly being included solely for the benefit of such series) or to surrender any right or power herein conferred upon the Company;
- (2) to evidence the succession of another Person to the Company, or successive successions, and the assumption by the successor corporation of the covenants, agreements and obligations of the Company pursuant to Article VIII;
- (3) to add any additional Events of Default for the benefit of the Holders of all or any series of Securities (and if such additional Events of Default are to be for the benefit of less than all series of Securities, stating that such additional Events of Default are expressly being included solely for the benefit of such series);
- (4) to add one or more guarantees for the benefit of Holders of the Securities;
- (5) to secure the Securities;
- (6) to evidence and provide for the acceptance of appointment hereunder by a successor Trustee with respect to the Securities of one or more series and to add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, pursuant to the requirements of Section 6.11;
- (7) subject to any limitations established pursuant to Section 3.1, to provide for the issuance of additional Securities of any series;

- (8) to establish the form or terms of Securities of any series as permitted by Section 2.1 and Section 3.1;
- (9) to comply with the rules of any applicable Depositary;
- (10) to add to or change any of the provisions of this Indenture to such extent as shall be necessary to permit or facilitate the issuance of Securities in uncertificated form;
- (11) to add to, change or eliminate any of the provisions of this Indenture in respect of one or more series of Securities; provided that any such addition, change or elimination (A) shall neither (i) apply to any Security of any series created prior to the execution of such supplemental indenture and entitled to the benefit of such provision nor (ii) modify the rights of the Holder of any such Security with respect to such provision or (B) shall become effective only when there is no Security described in clause (A) (i) Outstanding;
- (12) to cure any ambiguity, to correct or supplement any provision of this Indenture which may be defective or inconsistent with any other provision herein;
- (13) to change any other provision under this Indenture; provided that such action pursuant to this clause (13) shall not adversely affect the interests of the Holders of Securities of any series in any material respect;
- (14) to supplement any of the provisions of this Indenture to such extent as shall be necessary to permit or facilitate the defeasance and discharge of any series of Securities pursuant to Section 4.1, Section 13.2 and Section 13.3; provided that any such action shall not adversely affect the interests of the Holders of Securities of such series or any other series of Securities in any material respect;
- (15) to comply with the rules or regulations of any securities exchange or automated quotation system on which any of the Securities may be listed or traded; and
- (16) to add to, change or eliminate any of the provisions of this Indenture as shall be necessary or desirable in accordance with any amendments to the Trust Indenture Act, provided that such action does not adversely affect the rights or interests of any Holder of Securities in any material respect.

## **9.2 Supplemental Indentures With Consent of Holders.**

With the consent of the Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of each series affected by such supplemental indenture (including consents obtained in connection with a tender offer or exchange for Securities), by Act of said Holders delivered to the Company and the Trustee, the Company and the Trustee may enter into an indenture or indentures supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of modifying in any manner the rights of the Holders of Securities of such series under this Indenture; provided, however, no such supplemental indenture shall, without the consent of the Holder of each Outstanding Security of such series affected thereby:

- (1) change the Stated Maturity of the principal of, or any installment of principal of or interest on, any Security;
- (2) reduce the principal amount of any Security or reduce the amount of the principal of an Original Issue Discount Security or any other Security which would be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 5.2, or reduce the rate of interest on any Security;
- (3) reduce any premium payable upon the redemption of or change the date on which any Security may or must be redeemed;
- (4) change the coin or currency in which the principal of or premium, if any, or interest on any Security is payable;
- (5) impair the right of any Holder to institute suit for the enforcement of any such payment on or after the Stated Maturity thereof (or, in the case of redemption, on or after the Redemption Date);

(6) reduce the percentage in principal amount of the Outstanding Securities of any series, the consent of whose Holders is required for any such supplemental indenture, or the consent of whose Holders is required for any waiver (of compliance with certain provisions of this Indenture or certain defaults hereunder and their consequences) provided for in this Indenture;

(7) modify any of the provisions of this Section 9.2, Section 5.12 or Section 10.5, except to increase any such percentage or to provide that certain other provisions of this Indenture cannot be modified or waived without the consent of the Holder of each Outstanding Security affected thereby; provided, however, that this clause shall not be deemed to require the consent of any Holder with respect to changes in the references to "the Trustee" and concomitant changes in this Section 9.2 and Section 10.5, or the deletion of this proviso, in accordance with the requirements of Section 6.11 and Section 9.1(6); or

(8) if the Securities of any series are convertible into or for any other securities or property of the Company, make any change that adversely affects in any material respect the right to convert any Security of such series (except as permitted by Section 9.1) or decrease the conversion rate or increase the conversion price of any such Security of such series, unless such decrease or increase is permitted by the terms of such Security.

A supplemental indenture which changes or eliminates any covenant or other provision of this Indenture which has expressly been included solely for the benefit of one or more particular series of Securities, or which modifies the rights of the Holders of Securities of such series with respect to such covenant or other provision, shall be deemed not to affect the rights under this Indenture of the Holders of Securities of any other series.

It shall not be necessary for any Act of Holders under this Section 9.2 to approve the particular form of any proposed supplemental indenture, but it shall be sufficient if such Act shall approve the substance thereof.

After a supplemental indenture under this Section 2 becomes effective, the Company shall mail to the Trustee a notice briefly describing such supplemental indenture or a copy of such supplemental indenture and the Trustee shall mail such notice or supplemental indenture to Section 9.2 Holders affected thereby. Any failure of the Company to mail such notice, or any defect therein, or any failure of the Company to mail such supplemental indenture, shall not in any way impair or affect the validity of any such supplemental indenture.

### **9.3 Execution of Supplemental Indentures.**

In executing, or accepting the additional trusts created by, any supplemental indenture permitted by this Article IX or the modifications thereby of the trusts created by this Indenture, the Trustee shall be entitled to receive, and, subject to Section 6.1, shall be fully protected in relying upon, an Officer's Certificate and an Opinion of Counsel stating that the execution of such supplemental indenture is authorized or permitted by this Indenture and that all conditions precedent in this Indenture to the execution of such supplemental indenture, if any, have been complied with. The Trustee may, but shall not be obligated to, enter into any such supplemental indenture which affects the Trustee's own rights, duties or immunities under this Indenture or otherwise.

### **9.4 Effect of Supplemental Indentures.**

Upon the execution of any supplemental indenture under this Article IX, this Indenture shall be modified in accordance therewith, and such supplemental indenture shall form a part of this Indenture for all purposes; and every Holder of Securities theretofore or thereafter authenticated and delivered hereunder shall be bound thereby.

### **9.5 Conformity with Trust Indenture Act.**

Every supplemental indenture executed pursuant to this Article IX shall conform to the requirements of the Trust Indenture Act.

## **9.6 Reference in Securities to Supplemental Indentures.**

Securities of any series authenticated and delivered after the execution of any supplemental indenture pursuant to this Article IX may, and shall if required by the Trustee, bear a notation in form approved by the Trustee as to any matter provided for in such supplemental indenture. If the Company shall so determine, new Securities of any series so modified as to conform, in the opinion of the Trustee and the Company, to any such supplemental indenture may be prepared and executed by the Company and authenticated and delivered by the Trustee in exchange for Outstanding Securities of such series.

## **ARTICLE X COVENANTS**

### **10.1 Payment of Principal, Premium, if any, and Interest.**

The Company covenants and agrees for the benefit of each series of Securities that it will duly and punctually pay the principal of and premium, if any, and interest on the Securities of such series in accordance with the terms of the Securities and this Indenture. Principal and interest shall be considered paid on the date due if, on or before 11:00 a.m. (New York City time) on such date, the Trustee or the Paying Agent (or, if the Company or any of its Subsidiaries is the Paying Agent, the segregated account or separate trust fund maintained by the Company or such Subsidiary pursuant to Section 10.3) holds in accordance with this Indenture money sufficient to pay all principal and interest then due.

The Company shall pay interest on overdue principal at the rate specified therefor in the Securities, and it shall pay interest on overdue installments of interest at the same rate to the extent lawful as provided in Section 3.7.

Notwithstanding anything to the contrary contained in this Indenture, the Company or the Paying Agent may, to the extent it is required to do so by law, deduct or withhold income or other similar taxes imposed by the United States of America or other domestic or foreign taxing authorities from principal or interest payments hereunder.

### **10.2 Maintenance of Office or Agency.**

The Company will maintain in each Place of Payment for any series of Securities an office or agency where Securities of such series may be presented or surrendered for payment, where Securities of such series may be surrendered for registration of transfer or exchange, where Securities may be surrendered for conversion, and where notices and demands to or upon the Company in respect of the Securities of such series and this Indenture may be served. The Company will give prompt written notice to the Trustee of the location, and any change in the location, of such office or agency. If at any time the Company shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations, surrenders, notices and demands may be made or served at the Corporate Trust Office of the Trustee; and such required office or agency in New York, New York shall be at an office of the Trustee located at 101 Barclay Street, Floor 4W, New York, New York 10286, Attention: Corporate Trust Administration. The Company hereby appoints the Trustee as its agent to receive all such presentations, surrenders, notices and demands.

The Company may also from time to time designate one or more other offices or agencies where the Securities of one or more series may be presented or surrendered for any or all such purposes and may from time to time rescind such designations; provided, however, that no such designation or rescission shall in any manner relieve the Company of its obligation to maintain an office or agency in each Place of Payment for Securities of any series for such purposes. The Company will give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency.

With respect to any Global Security, and except as otherwise may be specified for such Global Security as contemplated by Section 3.1, the Corporate Trust Office of the Trustee shall be the Place of Payment where such Global Security may be presented or surrendered for payment or for registration of transfer or exchange, or where successor Securities may be delivered in exchange therefor; and such Place of Payment with respect to a Global Security in New York, New York shall be at an office of the Trustee located at 101 Barclay Street, Floor 4W, New York, New York 10286, Attention: Corporate Trust Administration; provided, however, that any such payment, presentation, surrender or delivery effected pursuant to the Applicable Procedures of the Depository for such Global Security shall be deemed to have been effected at the Place of Payment for such Global Security in accordance with the provisions of this Indenture.

### **10.3 Money for Securities Payments to Be Held in Trust.**

If the Company shall at any time act as its own Paying Agent with respect to any series of Securities, it will, on or before each due date for the principal of or premium, if any, or interest on any of the Securities of such series, segregate and hold in trust for the benefit of the Holders of such Securities a sum sufficient to pay the principal and premium, if any, and interest so becoming due until such sums shall be paid to such Holders or otherwise disposed of as herein provided and will promptly notify the Trustee of its action or failure so to act.

Whenever the Company shall have one or more Paying Agents for any series of Securities, it will, no later than 11:00 a.m. (New York City time) on each due date for the principal of or premium, if any, or interest on any Securities of such series, deposit with a Paying Agent a sum sufficient to pay such amount, such sum to be held in trust for the Holders of such Securities entitled to the same, and (unless such Paying Agent is the Trustee) the Company will promptly notify the Trustee of its action or failure so to act.

The Company will cause each Paying Agent for any series of Securities other than the Trustee to execute and deliver to the Trustee an instrument in which such Paying Agent shall agree with the Trustee, subject to the provisions of this Section 10.3, that such Paying Agent shall hold in trust for the benefit of Holders or the Trustee all money held by such Paying Agent for the payment of principal of or interest on the Securities and shall notify the Trustee in writing of any default by the Company in making any such payment.

The Company may at any time, for the purpose of obtaining the satisfaction and discharge of this Indenture or for any other purpose, pay, or by Company Order direct any Paying Agent to pay, to the Trustee all sums held in trust by the Company or such Paying Agent, such sums to be held by the Trustee upon the same trusts as those upon which such sums were held by the Company or such Paying Agent; and, upon such payment by any Paying Agent to the Trustee, such Paying Agent shall be released from all further liability with respect to such money.

Subject to any applicable abandoned property law, any money deposited with the Trustee or any Paying Agent, or then held by the Company, in trust for the payment of the principal of or premium, if any, or interest on any Security of any series and remaining unclaimed for two years after such principal, premium or interest has become due and payable shall be paid to the Company on Company Request, or (if then held by the Company) shall be discharged from such trust; and the Holder of such Security shall thereafter, as an unsecured general creditor, look only to the Company for payment thereof, and all liability of the Trustee or such Paying Agent with respect to such trust money, and all liability of the Company as trustee thereof, shall thereupon cease.

### **10.4 Statement by Officers as to Default.**

The Company shall deliver to the Trustee within 120 days after the end of each fiscal year of the Company ending after the date hereof an Officer's Certificate signed by its principal executive officer, principal financial officer or principal accounting officer, stating whether or not, to the best knowledge of such officer, the Company is in default in the performance and observance of any of the terms, provisions and conditions of this Indenture (without regard to any period of grace or requirement of notice provided hereunder) and, if the Company shall be in default, specifying all such defaults and the nature and status thereof of which they may have knowledge.

### **10.5 Waiver of Certain Covenants.**

Except as otherwise specified as contemplated by Section 3.1 for Securities of such series, the Company may, with respect to the Securities of any series, omit in any particular instance to comply with any term, provision or condition set forth in any covenant provided pursuant to Section 301(21), Section 9.1(1) or Section 9.1(8) for the benefit of the Holders of such series, if before the time for such compliance the Holders of at least a majority in aggregate principal amount of the Outstanding Securities of such series shall, by Act of such Holders, either waive such compliance in such instance or generally waive compliance with such term, provision or condition, but no such waiver shall extend to or affect such term, provision or condition except to the extent so expressly waived, and, until such waiver shall become effective, the obligations of the Company and the duties of the Trustee in respect of any such term, provision or condition shall remain in full force and effect.

**ARTICLE XI  
REDEMPTION OF SECURITIES**

**11.1 Applicability of Article.**

Securities of any series which are redeemable before their Stated Maturity shall be redeemable in accordance with their terms and (except as otherwise specified as contemplated by Section 3.1 for such Securities) in accordance with this Article XI.

**11.2 Election to Redeem; Notice to Trustee.**

The election of the Company to redeem any Securities shall be evidenced by a Board Resolution or an Officer's Certificate or in another manner specified as contemplated by Section 3.1 for such Securities. In case of any redemption at the election of the Company of the Securities of any series (including any such redemption affecting only a single Security), the Company shall, at least 45 days prior to the Redemption Date fixed by the Company (unless a shorter notice shall be satisfactory to the Trustee), notify the Trustee of such Redemption Date, of the principal amount of Securities of such series to be redeemed and, if applicable, of the tenor of the Securities to be redeemed. In the case of any redemption of Securities (a) prior to the expiration of any restriction on such redemption provided in the terms of such Securities or elsewhere in this Indenture, or (b) pursuant to an election of the Company which is subject to a condition specified in the terms of such Securities or elsewhere in this Indenture, the Company shall furnish the Trustee with an Officer's Certificate evidencing compliance with such restriction or condition.

**11.3 Selection by Trustee of Securities to Be Redeemed.**

If less than all the Securities of any series are to be redeemed (unless all the Securities of such series and of a specified tenor are to be redeemed or unless such redemption affects only a single Security), the particular Securities to be redeemed shall be selected not more than 60 days prior to the Redemption Date, from the Outstanding Securities of such series not previously called for redemption, by lot or, in the case of Global Securities, pursuant to applicable Depository procedures; provided that the unredeemed portion of the principal amount of any Security shall be in an authorized denomination (which shall not be less than the minimum authorized denomination) for such Security. If less than all the Securities of such series and of a specified tenor are to be redeemed (unless such redemption affects only a single Security), the particular Securities to be redeemed shall be selected not more than 60 days prior to the Redemption Date, from the Outstanding Securities of such series and specified tenor not previously called for redemption in accordance with the preceding sentence.

If any Security selected for partial redemption is converted in part before termination of the conversion right with respect to the portion of the Security so selected, the converted portion of such Security shall be deemed (so far as may be) to be the portion selected for redemption. Securities which have been converted during a selection of securities to be redeemed shall be treated by the Trustee as Outstanding for the purpose of such selection.

The Trustee shall promptly notify the Company in writing of the Securities selected for redemption as aforesaid and, in case of any Securities selected for partial redemption as aforesaid, the principal amount thereof to be redeemed.

The provisions of the three preceding paragraphs shall not apply with respect to any redemption affecting only a single Security, whether such Security is to be redeemed in whole or in part. In the case of any such redemption in part, the unredeemed portion of the principal amount of the Security shall be in an authorized denomination (which shall not be less than the minimum authorized denomination) for such Security.

For all purposes of this Indenture, unless the context otherwise requires, all provisions relating to the redemption of Securities shall relate, in the case of any Securities redeemed or to be redeemed only in part, to the portion of the principal amount of such Securities which has been or is to be redeemed. If the Company shall so direct, Securities registered in the name of the Company, any Affiliate or any Subsidiary thereof shall not be included in the Securities selected for redemption.

#### 11.4 Notice of Redemption.

Notice of redemption shall be given by first-class mail, postage prepaid, mailed or otherwise in accordance with the Applicable Procedures not less than 15 nor more than 60 days prior to the Redemption Date (or within such period as otherwise specified as contemplated by Section 3.1 for Securities of a series), to each Holder of Securities to be redeemed, at such Holder's address appearing in the Security Register.

All notices of redemption shall identify the Securities to be redeemed and shall state:

- (1) the Redemption Date;
- (2) the Redemption Price (or the method of calculating such price);
- (3) if less than all the Outstanding Securities of any series consisting of more than a single Security are to be redeemed, the identification (and, in the case of partial redemption of any such Securities, the principal amounts) of the particular Securities to be redeemed and, if less than all the Outstanding Securities of any series consisting of a single Security are to be redeemed, the principal amount of the particular Security to be redeemed;
- (4) that on the Redemption Date the Redemption Price will become due and payable upon each such Security to be redeemed and, if applicable, that interest thereon will cease to accrue on and after said date;
- (5) the place or places where each such Security is to be surrendered for payment of the Redemption Price;
- (6) for any Securities that by their terms may be converted, the terms of conversion, the date on which the right to convert the Security to be redeemed will terminate and the place or places where such Securities may be surrendered for conversion;
- (7) that the redemption is for a sinking fund, if such is the case; and
- (8) if applicable, the CUSIP numbers of the Securities of such series; provided, however, that no representation will be made as to the correctness or accuracy of the CUSIP number, or any similar number, if any, listed in such notice or printed on the Securities.

Notice of redemption of Securities to be redeemed at the election of the Company shall be given by the Company or, at the Company's request (which may be rescinded or revoked at any time prior to the time at which the Trustee shall have given such notice to the Holders), by the Trustee in the name and at the expense of the Company. The notice, if sent in the manner herein provided, shall be conclusively presumed to have been given, whether or not the Holder receives such notice. In any case, failure to give such notice by mail or otherwise in accordance with the Applicable Procedures or any defect in the notice to the Holder of any Security designated for redemption as a whole or in part shall not affect the validity of the proceedings for the redemption of any other Securities.

#### **11.5 Deposit of Redemption Price.**

By no later than 11:00 a.m. (New York City time) on any Redemption Date, the Company shall deposit with the Trustee or with a Paying Agent (or, if the Company is acting as its own Paying Agent, segregate and hold in trust as provided in Section 10.3) an amount of money sufficient to pay the Redemption Price of, and (except if the Redemption Date shall be an Interest Payment Date or the Securities of the series provide otherwise) accrued interest on, all the Securities which are to be redeemed on that date, other than Securities or portions of Securities called for redemption which are owned by the Company or a Subsidiary and have been delivered by the Company or such Subsidiary to the Trustee for cancellation. All money, if any, earned on funds held by the Paying Agent shall be remitted to the Company. In addition, the Paying Agent shall promptly return to the Company any money deposited with the Paying Agent by the Company in excess of the amounts necessary to pay the Redemption Price of, and accrued interest, if any, on, all Securities to be redeemed.

If any Security called for redemption is converted, any money deposited with the Trustee or with any Paying Agent or so segregated and held in trust for the redemption of such Security shall (subject to any right of the Holder of such Security or any Predecessor Security to receive interest as provided in the last paragraph of Section 3.7 or in the terms of such Security) be paid to the Company upon Company Request or, if then held by the Company, shall be discharged from such trust.

#### **11.6 Securities Payable on Redemption Date.**

Notice of redemption having been given as aforesaid, the Securities so to be redeemed shall, on the Redemption Date, become due and payable at the Redemption Price therein specified, and from and after such date (unless the Company shall default in the payment of the Redemption Price and accrued interest) such Securities shall cease to bear interest. Upon surrender of any such Security for redemption in accordance with said notice, such Security shall be paid by the Company at the Redemption Price, together, if applicable, with accrued interest to the Redemption Date; provided, however, that, unless otherwise specified as contemplated by Section 3.1, installments of interest whose Stated Maturity is on or prior to the Redemption Date will be payable to the Holders of such Securities, or one or more Predecessor Securities, registered as such at the close of business on the relevant Record Dates according to their terms and the provisions of Section 3.7; provided further that, unless otherwise specified as contemplated by Section 3.1, if the Redemption Date is after a Regular Record Date and on or prior to the Interest Payment Date, the accrued and unpaid interest shall be payable to the Holder of the redeemed Securities registered on the relevant Regular Record Date.

If any Security called for redemption shall not be so paid upon surrender thereof for redemption, the principal and premium, if any, shall, until paid, bear interest from the Redemption Date at the rate prescribed therefor in the Security.

#### **11.7 Securities Redeemed in Part.**

Any Security which is to be redeemed only in part shall be surrendered at a Place of Payment therefor (with, if the Company or the Trustee so requires, due endorsement by, or a written instrument of transfer in form satisfactory to the Company and the Trustee duly executed by, the Holder thereof or such Holder's attorney duly authorized in writing), and the Company shall execute, and the Trustee shall authenticate and deliver to the Holder of such Security without service charge, a new Security or Securities of the same series and of like tenor, of any authorized denomination as requested by such Holder, in principal amount equal to and in exchange for the unredeemed portion of the principal of the Security so surrendered.

**ARTICLE XII  
SINKING FUNDS**

**12.1 Applicability of Article.**

The provisions of this Article XII shall be applicable to any sinking fund for the retirement of Securities of any series except as otherwise specified as contemplated by Section 3.1 for such Securities.

The minimum amount of any sinking fund payment provided for by the terms of any series of Securities is herein referred to as a "mandatory sinking fund payment," and any payment in excess of such minimum amount provided for by the terms of such Securities is herein referred to as an "optional sinking fund payment." If provided for by the terms of any series of Securities, the cash amount of any sinking fund payment may be subject to reduction as provided in Section 12.2. Each sinking fund payment shall be applied to the redemption of Securities of the series as provided for by the terms of such Securities.

**12.2 Satisfaction of Sinking Fund Payments with Securities.**

The Company (1) may deliver Outstanding Securities of a series (other than any previously called for redemption) and (2) may apply as a credit Securities of a series which have been redeemed either at the election of the Company pursuant to the terms of such Securities or through the application of permitted optional sinking fund payments pursuant to the terms of such Securities, in each case in satisfaction of all or any part of any sinking fund payment with respect to any Securities of such series required to be made pursuant to the terms of such Securities as and to the extent provided for by the terms of such Securities; provided that the Securities to be so credited have not been previously so credited. The Securities to be so credited shall be received and credited for such purpose by the Trustee at the Redemption Price, as specified in the Securities so to be redeemed, for redemption through operation of the sinking fund and the amount of such sinking fund payment shall be reduced accordingly.

**12.3 Redemption of Securities for Sinking Fund.**

Not less than 60 days (or such shorter period as shall be satisfactory to the Trustee) prior to each sinking fund payment date for any Securities, the Company will deliver to the Trustee an Officer's Certificate specifying the amount of the next ensuing sinking fund payment for such Securities pursuant to the terms of such Securities, the portion thereof, if any, which is to be satisfied by payment of cash and the portion thereof, if any, which is to be satisfied by delivering and crediting Securities pursuant to Section 12.2 and will also deliver to the Trustee any Securities to be so delivered. Not less than 30 days prior to each such sinking fund payment date, the Securities to be redeemed upon such sinking fund payment date shall be selected in the manner specified in Section 11.3 and the Company shall cause notice of the redemption thereof to be given in the name of and at the expense of the Company in the manner provided in Section 11.4. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Section 11.6 and Section 11.7.

**ARTICLE XIII  
DEFEASANCE AND COVENANT DEFEASANCE**

**13.1 Company's Option to Effect Defeasance or Covenant Defeasance.**

Unless otherwise provided as contemplated by Section 3.1, Section 13.2 and Section 13.3 shall apply to all Securities or each series of Securities, as the case may be, in either case, denominated in U.S. dollars and bearing interest at a fixed rate, in accordance with any applicable requirements provided pursuant to Section 3.1 and upon compliance with the conditions set forth below in this Article XIII; and the Company may elect, at its option at any time, to have Section 13.2 and Section 13.3 applied to any Securities or any series of Securities, as the case may be, pursuant to such Section 13.2 or Section 13.3, in accordance with any applicable requirements provided pursuant to Section 3.1 and upon compliance with the conditions set forth below in this Article XIII. Any such election to have or not to have Section 13.2 and Section 13.3 apply, as the case may be, shall be evidenced by a Board Resolution, Officer's Certificate or in another manner specified as contemplated by Section 3.1 for such Securities.

### 13.2 Defeasance and Discharge.

Upon the Company's exercise of its option, if any, to have this Section 13.2 applied to any Securities or any series of Securities, as the case may be, or if this Section 13.2 shall otherwise apply to any Securities or any series of Securities, as the case may be, the Company shall be deemed to have been discharged from its obligations with respect to such Securities as provided in this Section 13.2 on and after the date the conditions set forth in Section 13.4 are satisfied (hereinafter called "Defeasance"). For this purpose, such Defeasance means that the Company shall be deemed to have paid and discharged the entire indebtedness represented by such Securities and to have satisfied all its other obligations under such Securities and this Indenture insofar as such Securities are concerned (and the Trustee, at the expense of the Company, shall execute proper instruments acknowledging the same), subject to the following which shall survive until otherwise terminated or discharged hereunder: (1) the rights of Holders of such Securities to receive, solely from the trust fund described in Section 13.4 and as more fully set forth in such Section 13.5, payments in respect of the principal of and premium, if any, and interest on such Securities when payments are due, (2) the Company's obligations with respect to such Securities under Section 3.4, Section 3.5, Section 3.6, Section 10.2 and Section 10.3, (3) the rights, powers, trusts, duties and immunities of the Trustee hereunder and (4) this Article XIII. Subject to compliance with this Article XIII, the Company may exercise its option, if any, to have this Section 13.2 applied to the Securities of any series notwithstanding the prior exercise of its option, if any, to have Section 13.3 applied to such Securities.

### 13.3 Covenant Defeasance.

Upon the Company's exercise of its option, if any, to have this Section 13.3 applied to any Securities or any series of Securities, as the case may be, or if this Section 13.3 shall otherwise apply to any Securities or any series of Securities, as the case may be, (1) the Company shall be released from its obligations under any covenants provided pursuant to Section 3.1(21), Section 9.1(1) or Section 9.1(8) for the benefit of the Holders of such Securities and (2) the occurrence of any event specified in Section 5.1(3) and Section 5.1(6) shall be deemed not to be or result in an Event of Default, in each case with respect to such Securities as provided in this Section 13.3 on and after the date the conditions set forth in Section 13.4 are satisfied (hereinafter called "Covenant Defeasance"). For this purpose, such Covenant Defeasance means that, with respect to such Securities, the Company may omit to comply with and shall have no liability in respect of any term, condition or limitation set forth in any such specified Section, whether directly or indirectly by reason of any reference elsewhere herein to any such Section or by reason of any reference in any such Section to any other provision herein or in any other document, but the remainder of this Indenture and such Securities shall be unaffected thereby.

### 13.4 Conditions to Defeasance or Covenant Defeasance.

The following shall be the conditions to the application of Section 13.2 or Section 13.3 to any Securities or any series of Securities, as the case may be:

(1) The Company shall irrevocably have deposited or caused to be deposited with the Trustee (or another trustee which satisfies the requirements contemplated by Section 6.9 and agrees to comply with the provisions of this Article XIII applicable to it) as trust funds in trust for the purpose of making the following payments, specifically pledged as security for, and dedicated solely to, the benefits of the Holders of such Securities, (A) money in an amount, or (B) U.S. Government Obligations which through the scheduled payment of principal and interest in respect thereof in accordance with their terms will provide money in an amount, or (C) a combination thereof, in each case sufficient, in the opinion of an independent public accountant or financial advisor expressed in a written certification thereof delivered to the Trustee, to pay and discharge, and which shall be applied by the Trustee (or any such other qualifying trustee) to pay and discharge, the principal of and premium, if any, and interest on such Securities on the respective Stated Maturities, in accordance with the terms of this Indenture and such Securities. As used herein, "U.S. Government Obligation" means (x) any security which is (i) a direct obligation of the United States of America for the payment of which the full faith and credit of the United States of America is pledged or (ii) an obligation of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America, which, in either case (i) or (ii), is not callable or redeemable at the option of the issuer thereof, and (y) any depositary receipt issued by a bank (as defined in Section 3(a)(2) of the Securities Act) as custodian with respect to any U.S. Government Obligation which is specified in clause (x) above and held by such bank for the account of the holder of such depositary receipt, or with respect to any specific payment of principal or interest on any U.S. Government Obligation which is so specified and held; provided that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depositary receipt from any amount received by the custodian in respect of the U.S. Government Obligation or the specific payment of principal or interest evidenced by such depositary receipt.

(2) In the event of an election to have Section 13.2 apply to any Securities or any series of Securities, as the case may be, the Company shall have delivered to the Trustee an Opinion of Counsel stating that (A) the Company has received from, or there has been published by, the Internal Revenue Service a ruling or (B) since the date of this Indenture, there has been a change in the applicable Federal income tax law, in either case (A) or (B) to the effect that, and based thereon such opinion shall confirm that, the Holders of such Securities will not recognize gain or loss for Federal income tax purposes as a result of the deposit, Defeasance and discharge to be effected with respect to such Securities and will be subject to Federal income tax on the same amount, in the same manner and at the same times as would be the case if such deposit, Defeasance and discharge were not to occur.

(3) In the event of an election to have Section 13.3 apply to any Securities or any series of Securities, as the case may be, the Company shall have delivered to the Trustee an Opinion of Counsel to the effect that the Holders of such Securities will not recognize gain or loss for Federal income tax purposes as a result of the deposit and Covenant Defeasance to be effected with respect to such Securities and will be subject to Federal income tax on the same amount, in the same manner and at the same times as would be the case if such deposit and Covenant Defeasance were not to occur.

(4) The Company shall have delivered to the Trustee an Officer's Certificate to the effect that neither such Securities nor any other Securities of the same series, if then listed on any securities exchange, will be delisted as a result of such deposit.

(5) No Default or Event of Default with respect to such Securities or any other Securities shall have occurred and be continuing at the time of such deposit or, insofar as Sections 5.1(4) or 5.1(5) are concerned, at any time on or prior to the 90th day after the date of such deposit (it being understood that this condition shall not be deemed satisfied until after such 90th day).

(6) Such Defeasance or Covenant Defeasance shall not result in a breach or violation of, or constitute a default under, any other material agreement or instrument to which the Company is a party or by which it is bound.

(7) The Company shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that all conditions precedent with respect to such Defeasance or Covenant Defeasance have been complied with (in each case, subject to the satisfaction of the condition in clause (5)).

Before or after a deposit, the Company may make arrangements satisfactory to the Trustee for the redemption of Securities at a future date in accordance with Article XI.

### **13.5 Deposited Money and U.S. Government Obligations to Be Held in Trust; Miscellaneous Provisions.**

Subject to the provisions of the last paragraph of Section 10.3, all money and U.S. Government Obligations (including the proceeds thereof) deposited with the Trustee or other qualifying trustee (solely for purposes of this Section 13.5 and Section 13.6, the Trustee and any such other trustee are referred to collectively as the "Trustee") pursuant to Section 13.4 in respect of any Securities shall be held in trust and applied by the Trustee, in accordance with the provisions of such Securities and this Indenture, to the payment, either directly or through any such Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Holders of such Securities, of all sums due and to become due thereon in respect of principal and premium, if any, and interest, but money so held in trust need not be segregated from other funds except to the extent required by law.

The Company shall pay and indemnify the Trustee against any tax, fee or other charge imposed on or assessed against the U.S. Government Obligations deposited pursuant to Section 13.4 or the principal and interest received in respect thereof other than any such tax, fee or other charge which by law is for the account of the Holders of Outstanding Securities; provided that the Trustee shall be entitled to charge any such tax, fee or other charge to such Holder's account.

Anything in this Article XIII to the contrary notwithstanding, the Trustee shall deliver or pay to the Company from time to time upon Company Request any money or U.S. Government Obligations held by it as provided in Section 13.4 with respect to any Securities which are in excess of the amount thereof which would then be required to be deposited to effect the Defeasance or Covenant Defeasance, as the case may be, with respect to such Securities.

### **13.6 Reinstatement.**

If the Trustee or the Paying Agent is unable to apply any money in accordance with this Article XIII with respect to any Securities by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, then the obligations under this Indenture and such Securities from which the Company has been discharged or released pursuant to Section 13.2 or Section 13.3 shall be revived and reinstated as though no deposit had occurred pursuant to this Article XIII with respect to such Securities, until such time as the Trustee or Paying Agent is permitted to apply all money held in trust pursuant to Section 13.5 with respect to such Securities in accordance with this Article XIII; provided, however, that (a) if the Company makes any payment of principal or premium, if any, or interest on any such Security following such reinstatement of its obligations, the Company shall be subrogated to the rights, if any, of the Holders of such Securities to receive such payment from the money so held in trust and (b) unless otherwise required by any legal proceeding or any order or judgment of any court or governmental authority, the Trustee or Paying Agent shall return all such money and U.S. Government Obligations to the Company promptly after receiving a written request therefor at any time, if such reinstatement of the Company's obligations has occurred and continues to be in effect.

**ARTICLE XIV  
REPAYMENT AT THE OPTION OF HOLDERS**

**14.1 Applicability of Article.**

Repayment of Securities of any series before their Stated Maturity at the option of Holders thereof shall be made in accordance with the terms of such Securities and (except as otherwise specified as contemplated by Section 3.1 for Securities of any series) in accordance with this Article XIV.

**14.2 Repayment of Securities.**

Securities of any series subject to repayment in whole or in part at the option of the Holders thereof will, unless otherwise provided in the terms of such Securities, be repaid at a price equal to the principal amount thereof and premium, if any, thereon, together with interest thereon accrued to the Repayment Date specified in or pursuant to the terms of such Securities. The Company covenants that on or before the Repayment Date it will deposit with the Trustee or with a Paying Agent (or, if the Company is acting as its own Paying Agent, segregate and hold in trust as provided in Section 10.3) an amount of money sufficient to pay the principal (or, if so provided by the terms of the Securities of any series, a percentage of the principal) of, the premium, if any, and (except if the Repayment Date shall be an Interest Payment Date) accrued interest on, all the Securities or portions thereof, as the case may be, to be repaid on such date.

**14.3 Exercise of Option.**

Securities of any series subject to repayment at the option of the Holders thereof will contain an "Option to Elect Repayment" form on the reverse of such Securities. To be repaid at the option of the Holder, any Security so providing for such repayment, with the "Option to Elect Repayment" form on the reverse of such Security duly completed by the Holder (or by the Holder's attorney duly authorized in writing), must be received by the Company at the Place of Payment therefor specified in the terms of such Security (or at such other place or places of which the Company shall from time to time notify the Holders of such Securities) not earlier than 45 days nor later than 30 days prior to the Repayment Date. If less than the entire principal amount of such Security is to be repaid in accordance with the terms of such Security, the principal amount of such Security to be repaid, in increments of the minimum denomination for Securities of such series, and the denomination or denominations of the Security or Securities to be issued to the Holder for the portion of the principal amount of such Security surrendered that is not to be repaid, must be specified. The principal amount of any Security providing for repayment at the option of the Holder thereof may not be repaid in part if, following such repayment, the unpaid principal amount of such Security would be less than the minimum authorized denomination of Securities of the series of which such Security to be repaid is a part. Except as otherwise may be provided by the terms of any Security providing for repayment at the option of the Holder thereof, exercise of the repayment option by the Holder shall be irrevocable unless waived by the Company.

**14.4 When Securities Presented for Repayment Become Due and Payable.**

If Securities of any series providing for repayment at the option of the Holders thereof shall have been surrendered as provided in this Article XIV and as provided by or pursuant to the terms of such Securities, such Securities or the portions thereof, as the case may be, to be repaid shall become due and payable and shall be paid by the Company on the Repayment Date therein specified, and on and after such Repayment Date (unless the Company shall default in the payment of such Securities on such Repayment Date) such Securities shall, if the same were interest-bearing, cease to bear interest. Upon surrender of any such Security for repayment in accordance with such provisions, the principal amount of such Security so to be repaid shall be paid by the Company, together with accrued interest and/or premium, if any, to (but excluding) the Repayment Date; provided, however, that, unless otherwise specified as contemplated by Section 3.1, installments of interest, if any, whose Stated Maturity is on or prior to the Repayment Date shall be payable (but without interest thereon, unless the Company shall default in the payment thereof) to the Holders of such Securities, or one or more Predecessor Securities, registered as such at the close of business on the relevant Record Dates according to their terms and the provisions of Section 3.7.

If the principal amount of any Security surrendered for repayment shall not be so repaid upon surrender thereof, such principal amount (together with interest, if any, thereon accrued to such Repayment Date) and any premium shall, until paid, bear interest from the Repayment Date at the rate of interest or yield to maturity (in the case of Original Issue Discount Securities) set forth in such Security.

**14.5 Securities Repaid in Part.**

Upon surrender of any Security which is to be repaid in part only, the Company shall execute and the Trustee shall authenticate and deliver to the Holder of such Security, without service charge and at the expense of the Company, a new Security or Securities of the same series, of any authorized denomination specified by the Holder, in a principal amount equal to and in exchange for the portion of the principal of such Security so surrendered which is not to be repaid.

\* \* \*

This Indenture may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same instrument.

*[Signature page follows]*

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be duly executed, all as of the day and year first above written.

**22ND CENTURY GROUP, INC.**

By: \_\_\_\_\_  
Name:  
Title:

[\_\_\_\_\_] ,  
as Trustee

By: \_\_\_\_\_  
Name:  
Title:

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## ATTORNEYS AT LAW

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July 21, 2020

22nd Century Group, Inc.  
 8560 Main Street, Suite 4  
 Williamsville, New York 14221

Ladies and Gentlemen:

We have acted as securities counsel for 22nd Century Group, Inc., a Nevada corporation (the "Company"), in connection with the preparation of a Registration Statement on Form S-3 (the "Registration Statement"), including the prospectus constituting a part thereof (the "Prospectus"), to be filed with the Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended (the "Securities Act"), relating to the potential issuance and sale by the Company from time to time of up to \$100 million aggregate amount of any of the following: (i) shares of the Company's common stock, \$0.00001 par value (the "Common Stock"); (ii) shares of the Company's preferred stock, \$0.00001 par value (the "Preferred Stock"); (iii) contracts (the "Securities Purchase Contracts") that obligate holders to purchase from the Company, and the Company to sell to these holders, shares of the Common Stock or other securities at a future date; (iv) units (the "Units") consisting of one or more shares of Common Stock, shares of Preferred Stock, Debt Securities, Warrants, Rights, Securities Purchase Contracts or any combination of the foregoing; (v) debt securities of the Company (the "Debt Securities"); (vi) subscription rights (the "Rights") to purchase Debt Securities, Common Stock, Preferred Stock or other securities of the Company (or any combination thereof); and (vii) warrants (the "Warrants") to purchase Common Stock, Preferred Stock, Debt Securities, Units or other securities of the Company. The Common Stock, the Preferred Stock, the Securities Purchase Contracts, the Units, the Debt Securities, the Rights and the Warrants are referred to herein collectively as the "Securities." The Registration Statement also related to the issuance of up to 11,293,211 shares of Common Stock (the "Warrant Shares") upon the exercise of the Company's outstanding warrants issued in November 2019 that were registered under the Company's prior registration statement on Form S-3 (Registration No. 333-215391) as declared effective by the SEC on January 17, 2017. The Prospectus provides that it will be supplemented in the future by one or more supplements to such Prospectus and/or other offering material in connection with the Company's specific proposed offering of any of such Securities (each, a "Prospectus Supplement").

As securities counsel to the Company in connection with the proposed potential issuance and sale of the above referenced Securities, we have examined: (i) the Registration Statement, including the Prospectus, and the exhibits (including those incorporated by reference) constituting a part of the Registration Statement; (ii) the Company's Amended and Restated Articles of Incorporation and Bylaws, each as amended to date; (iii) the Form of Indenture, filed as an exhibit to the Registration Statement; (iv) certain resolutions of the Board of Directors of the Company relating to the registration of the Securities; (v) the form of warrant relating to the Warrant Shares and (vi) such other proceedings, documents and records as we have deemed necessary or appropriate to enable us to render this opinion.

BOSTON	JACKSONVILLE	MILWAUKEE	SAN DIEGO	TALLAHASSEE
BRUSSELS	LOS ANGELES	NEW YORK	SAN FRANCISCO	TAMPA
CHICAGO	MADISON	ORLANDO	SHANGHAI	TOKYO
DETROIT	MIAMI	SACRAMENTO	SILICON VALLEY	WASHINGTON, D.C.



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In our examination of the above-referenced documents, we have assumed the genuineness of all signatures, the authenticity of all documents, certificates and instruments submitted to us as originals and the conformity with the originals of all documents submitted to us as copies. We have also assumed that (i) the Registration Statement, and any amendments thereto (including post-effective amendments), will have become effective and will comply with all applicable laws; (ii) a Prospectus Supplement, if required, will have been prepared and filed with the SEC describing the Securities offered thereby; (iii) all Securities will be issued and sold in compliance with applicable federal and state securities laws and in the manner stated in the Registration Statement and any applicable Prospectus Supplement; (iv) any indenture (including the Form of Indenture) providing for the issuance of Debt Securities, together with any supplemental indenture or officer's certificate setting forth the terms of a series of Debt Securities to be issued under such indenture, will each be duly authorized, executed and delivered by the parties thereto in substantially the form reviewed by us; (v) a Form T-1 will be filed with the SEC with respect to the trustee executing any indenture or any supplemental indenture to such indenture; (vi) a definitive purchase, underwriting, placement, dealer or similar agreement with respect to any Securities offered will have been duly authorized and validly executed and delivered by the Company and the other parties thereto; (vii) any Securities issuable upon conversion, exchange or exercise of any Security being offered will have been duly authorized, created and, if appropriate, reserved for issuance upon such conversion, exchange or exercise; and (viii) with respect to shares of Common Stock or Preferred Stock offered, there will be sufficient shares of Common Stock or Preferred Stock authorized under the Company's Amended and Restated Articles of Incorporation, and not otherwise reserved for issuance.

Based upon and subject to the foregoing and the other matters set forth herein, and having regard for such legal considerations as we deem relevant, we are of the opinion that:

1. All requisite actions necessary to make the shares of Common Stock subsequently offered by the Company under the Registration Statement validly issued, fully paid and non-assessable shall have been taken when:
    - a. The Company's Board of Directors, or a committee thereof duly authorized by the Board of Directors, has adopted appropriate resolutions to authorize the issuance and sale of the Common Stock; and
    - b. Such shares of Common Stock have been issued and sold by the Company for the consideration contemplated by, and otherwise in conformity with, the Registration Statement, as supplemented by a Prospectus Supplement with respect to such issuance and sale, and the acts, proceedings and documents referred to above.
  2. All requisite actions necessary to make the shares of Preferred Stock subsequently offered by the Company under the Registration Statement validly issued, fully paid and non-assessable shall have been taken when:
    - a. The Company's Board of Directors, or a committee thereof duly authorized by the Board of Directors, has adopted appropriate resolutions to establish the voting powers, designations, preferences and relative, participating, optional or other special rights, if any, or the qualifications, limitations or restrictions, if any, and other terms of such shares as set forth in or contemplated by the Registration Statement, the exhibits thereto and any Prospectus Supplement relating to such Preferred Stock, and to authorize the issuance and sale of such shares of Preferred Stock;
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- b. Certificate of Amendment to the Company's Amended and Restated Articles of Incorporation with respect to any such established voting powers, designations, preferences and relative, participating, optional or other special rights, if any, or the qualifications, limitations or restrictions, if any, and other terms of such shares have been filed with the State of Nevada in the form and manner required by law; and
  - c. Such shares of Preferred Stock have been issued and sold by the Company for the consideration contemplated by, and otherwise in conformity with, the Registration Statement, as supplemented by a Prospectus Supplement with respect to such issuance and sale, and the acts, proceedings and documents referred to above.
3. All requisite actions necessary to make the Securities Purchase Contracts and Units subsequently offered by the Company under the Registration Statement valid, legal and binding obligations of the Company, subject to (i) bankruptcy, insolvency, reorganization, fraudulent transfer, fraudulent conveyance, moratorium and other similar laws of general application affecting the rights and remedies of creditors and (ii) general principles of equity, regardless of whether applied in a proceeding in equity or at law, shall have been taken when:
- a. The Company's Board of Directors, or a committee thereof or one or more officers of the Company, in each case duly authorized by the Board of Directors, has taken action to approve and establish the terms and form of such Securities Purchase Contracts and the documents, including any agreements, evidencing and used in connection with the issuance and sale of such Units, and to authorize the issuance and sale of such Securities Purchase Contracts and Units;
  - b. The terms of such Securities Purchase Contracts and Units and of their issuance and sale have been established so as not to violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and so as to comply with any requirements or restrictions imposed by any court or governmental entity having jurisdiction over the Company;
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- c. Such Securities Purchase Contracts and Units have been duly executed and delivered in accordance with their respective terms and provisions, as applicable; and
  - d. Such Securities Purchase Contracts and Units have been sold by the Company for the consideration contemplated by, and otherwise in conformity with, the Registration Statement, as supplemented by a Prospectus Supplement with respect to such issuance and sale, and the acts, proceedings and documents referred to above.
4. All requisite actions necessary to make the Debt Securities subsequently offered by the Company under the Registration Statement valid, legal and binding obligations of the Company, subject to (i) bankruptcy, insolvency, reorganization, fraudulent transfer, fraudulent conveyance, moratorium and other similar laws of general application affecting the rights and remedies of creditors and (ii) general principles of equity, regardless of whether applied in a proceeding in equity or at law, shall have been taken when:
- a. The Company's Board of Directors, or a committee thereof or one or more officers of the Company, in each case duly authorized by the Board of Directors, has taken action to establish the terms of such Debt Securities and to authorize the issuance and sale of such Debt Securities;
  - b. The terms of such Debt Securities and of their issuance and sale by the Company have been established in conformity with the underlying indenture so as not to violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and so as to comply with any requirements or restrictions imposed by any court or governmental entity having jurisdiction over the Company;
  - c. Such Debt Securities have been duly executed, authenticated and delivered in accordance with the terms and provisions of the underlying indenture; and
  - d. Such Debt Securities have been issued and sold by the Company for the consideration contemplated by, and otherwise in conformity with, the Registration Statement, as supplemented by a Prospectus Supplement with respect to such issuance and sale, and the acts, proceedings and documents referred to above.
5. All requisite actions necessary to make the Rights subsequently offered by the Company under the Registration Statement valid, legal and binding obligations of the Company, subject to (i) bankruptcy, insolvency, reorganization, fraudulent transfer, fraudulent conveyance, moratorium and other similar laws of general application affecting the rights and remedies of creditors and (ii) general principles of equity, regardless of whether applied in a proceeding in equity or at law, shall have been taken when:
- a. The Company's Board of Directors, or a committee thereof or one or more officers of the Company, in each case duly authorized by the Board of Directors, has taken action to establish the terms of such Rights and to authorize the issuance and sale of such Rights;
  - b. The terms of such Rights and of their issuance and sale have been established so as not to violate any applicable law or result in a default or breach of any agreement or instrument binding upon the Company and so as to comply with any requirements or restrictions imposed by any court or governmental entity having jurisdiction over the Company; and
  - c. Such Rights have been issued and sold by the Company for the consideration contemplated by, and otherwise in conformity with, the Registration Statement, as supplemented by a Prospectus Supplement with respect to such issuance and sale, and the acts, proceedings and documents referred to above.
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6. All requisite actions necessary to make the Warrants subsequently offered by the Company under the Registration Statement will be valid, legal and binding obligations of the Company, subject to (i) bankruptcy, insolvency, reorganization, fraudulent transfer, fraudulent conveyance, moratorium and other similar laws of general application affecting the rights and remedies of creditors and (ii) general principles of equity, regardless of whether applied in a proceeding in equity or at law, shall have been taken when:
  - a. The Company's Board of Directors, or a committee thereof or one or more officers of the Company, in each case duly authorized by the Board of Directors, has taken action to approve and establish the terms and form of the Warrants and the documents, including any warrant agreements, evidencing and used in connection with the issuance and sale of the Warrants, and to authorize the issuance and sale of such Warrants;
  - b. The terms of such Warrants and of their issuance and sale by the Company have been established so as not to violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and so as to comply with any requirements or restrictions imposed by any court or governmental entity having jurisdiction over the Company;
  - c. Any such warrant agreements have been duly executed and delivered;
  - d. Such Warrants have been duly executed and delivered in accordance with the terms and provisions of any applicable warrant agreement; and
  - e. Such Warrants have been issued and sold by the Company for the consideration contemplated by, and otherwise in conformity with, the Registration Statement, as supplemented by a Prospectus Supplement with respect to such issuance and sale, and the acts, proceedings and documents referred to above.
7. The Warrant Shares, when issued and paid for upon the exercise of the warrants, and in accordance with the provisions thereof, will be validly issued, fully paid and nonassessable.

We render no opinion as to the effect of the laws of any state or jurisdiction other than the laws of the State of New York, the corporate law of the State of Nevada and the federal laws of the United States. We assume no obligation to supplement this opinion letter if any applicable law changes after the date hereof or if we become aware of any fact that might change the opinions expressed herein after the date hereof.

We hereby consent to the filing of this letter as an exhibit to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the prospectus that is a part of the Registration Statement. In giving this consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act of the rules and regulations of the Commission.

Very truly yours,

/s/ Foley & Lardner LLP

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**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 11, 2020, relating to the consolidated financial statements and the effectiveness of internal controls over financial reporting of 22<sup>nd</sup> Century Group, Inc. appearing in the 2019 Annual Report to Shareholders and incorporated by reference in the Annual Report on Form 10-K of 22<sup>nd</sup> Century Group, Inc for the year ended December 31, 2019.

We also consent to the reference to our firm under the captions "Experts".

/s/ Freed Maxick CPAs, P.C.

Buffalo, New York  
July 21, 2020

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