

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

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933
EMCORE Corporation
(Exact name of registrant as specified in its charter)

New Jersey
(State or other jurisdiction of
incorporation or organization)

22-2746503
(I.R.S. Employer
Identification Number)

2015 W. Chestnut Street
Alhambra, California, 91803
Telephone: (626) 293-3400
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Tom Minichiello
Chief Financial Officer
EMCORE Corporation
2015 W. Chestnut Street
Alhambra, California 91803
Telephone: (626) 293-3400
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:
Shelly Heyduk
O'Melveny & Myers LLP
610 Newport Center Drive
Newport Beach, California 92660
Telephone: (949) 823-6900

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. ☐ o
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, check the following box. ☒ x
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. ☐ o
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. ☐ o
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. ☐ o
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. ☐ o
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 ☐ o Accelerated filer ☒ x Non-accelerated filer ☐ o Smaller reporting company ☐ x Emerging growth company ☐ o
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 Securities Act. ☐ o

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)(2)	Amount of Registration Fee(2)
Common Stock, no par value per share		
Preferred Stock, par value \$0.0001 per share		
Debt Securities		
Warrants		
Rights		
Units		
Offering Total	\$ 30,000,000	\$ 3,894(3)

- (1) We are registering an indeterminate aggregate principal amount and number of securities of each identified class of securities up to a proposed aggregate offering price of \$30 million, which may be offered from time to time in unspecified numbers and at indeterminate prices, as may be issued upon conversion, redemption, repurchase, exchange or exercise of any securities registered hereunder, including under any applicable anti-dilution provisions. Pursuant to Rule 416(a) promulgated under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers an indeterminate number of securities that may become issuable as a result of stock splits, stock dividends or similar transactions relating to the securities registered hereunder.
- (2) The proposed maximum aggregate offering price per class of security will be determined from time to time by us in connection with the issuance by us of the securities registered hereunder and is not specified as to each class of security pursuant to General Instruction II.D. of Form S-3 under the Securities Act.
- (3) Calculated pursuant to Rule 457(o) under the Securities Act.

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, as amended, 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.

The information in this prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission, of which this document is a part, is effective.

SUBJECT TO COMPLETION, DATED JANUARY 6, 2020

PROSPECTUS



EMCORE Corporation

\$30,000,000
Common Stock
Preferred Stock
Debt Securities
Warrants
Rights
Units

From time to time, we may offer to sell the securities described in this prospectus separately or together in any combination, in one or more classes or series, in amounts, at prices and on terms that we will determine at the time of any such offering.

This prospectus describes some of the general terms that may apply to the offered securities. Each time any securities are offered pursuant to this prospectus, we will provide the specific terms of the securities to be offered in one or more supplements to this prospectus. Prospectus supplements may also add, update or change information in this prospectus.

The securities offered by this prospectus and any accompanying prospectus supplement may be offered by us directly to investors, to or through underwriters, dealers or other agents, or through a combination of these methods. The prospectus supplement for each offering will describe in detail the plan of distribution for that offering and will set forth the names of any underwriters, dealers or agents involved in the offering and any applicable fees, commissions or discount arrangements.

Our common stock is listed on The Nasdaq Stock Market LLC under the symbol "EMKR." Any prospectus supplement will indicate if the securities offered thereby will be listed on any securities exchange.

You should carefully read this prospectus and any applicable prospectus supplement, together with the documents we incorporate by reference, before you invest in our securities. This prospectus may not be used to offer and sell our securities unless accompanied by a prospectus supplement describing the method and terms of the offering.

Investing in any of our securities involves a high degree of risk. Please read carefully the section entitled "Risk Factors" on page 5 of this prospectus and the "Risk Factors" section contained in any applicable prospectus supplement and in the documents incorporated by reference in this prospectus before investing in our securities.

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

This prospectus is part of a “shelf” registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “SEC”) using a “shelf” registration process. Under this shelf registration process, we may, from time to time, sell any combination of the securities described in this prospectus in one or more offerings.

This prospectus provides you with a general description of the securities we may offer pursuant to the registration statement of which this prospectus forms a part. Each time we sell securities pursuant to the registration statement of which this prospectus forms a part, we will provide a prospectus supplement that contains specific information about the terms of that offering. The prospectus supplement may also add to, update or change the information contained in or incorporated by reference in this prospectus.

We are responsible only for the information contained in or incorporated by reference in this prospectus, any prospectus supplement and any free writing prospectus prepared by or on behalf of us or to which we have referred you. We have not authorized anyone to provide you with different information. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are not making offers to sell the securities described in this prospectus in any jurisdiction in which an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation.

Before purchasing any securities, you should carefully read both this prospectus and any prospectus supplement, together with the additional information described under the heading “Where You Can Find More Information” and “Information We Incorporate by Reference.” You should assume that the information contained in this prospectus, any prospectus supplement or any free writing prospectus is accurate only as of the date on its respective cover, and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates.

References in this prospectus to the terms “we,” “us,” “our,” “EMCORE,” “the Company” or other similar terms refer to EMCORE Corporation and its consolidated subsidiaries.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public at the SEC’s website at www.sec.gov. Our website is located at www.emcore.com. Through links on the “Investors” portion of our website, we make available free of charge our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, any amendments to those reports and other information filed with, or furnished to, the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Such material is made available through our website as soon as reasonably practicable after we electronically file the information with, or furnish it to, the SEC. The information contained on or that can be accessed through our website does not constitute part of this prospectus, except for reports filed with the SEC that are specifically incorporated herein by reference.

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC. This prospectus does not contain all of the information included in the registration statement. Forms of any indenture or other documents establishing the terms of the offered securities are filed as exhibits to the registration statement of which this prospectus forms a part or will be filed through an amendment to our registration statement on Form S-3 or under cover of a Current Report on Form 8-K or other filed document and incorporated into this prospectus by reference. Statements in this prospectus about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. The full registration statement, including exhibits thereto, may be obtained from the SEC or us as indicated above.

INFORMATION WE INCORPORATE BY REFERENCE

The SEC allows us to “incorporate by reference” information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. We incorporate by reference in this prospectus the following documents and reports (other than, in each case, the portions that are deemed to have been furnished and not filed in accordance with SEC rules):

- [our Annual Report on Form 10-K for the fiscal year ended September 30, 2019, filed with the SEC on December 10, 2019;](#)
- our Current Reports on Form 8-K filed with the SEC on [October 30, 2019](#) (with respect to Item 1.01 and Exhibits 2.1 and 10.1 only), on [December 26, 2019](#) and on [January 6, 2020](#) and our Current Report on Form 8-K/A filed with the SEC on [August 23, 2019](#); and
- the description of our common stock contained in Exhibit 4.2 of our [Annual Report on Form 10-K for the fiscal year ended September 30, 2019, filed with the SEC on December 10, 2019](#), which updated the description thereof contained in our Registration Statement on [Form 8-A, filed with the SEC on February 26, 1997 \(File No. 000-22175\)](#).

We also incorporate by reference the information contained in all other documents that we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than the portions that are deemed to have been furnished and not filed in accordance with SEC rules, unless otherwise indicated therein), on or after the date of the registration statement of which this prospectus forms a part and prior to its effectiveness and prior to the completion of the offering of all securities under this prospectus and any prospectus supplement, including the portions of our Definitive Proxy Statement on Schedule 14A to be filed with the SEC within 120 days of our fiscal year end and that are to be incorporated by reference in Part III of our Annual Report on Form 10-K for the fiscal year ended September 30, 2019. The information contained in any such document will be considered part of this prospectus from the date the document is filed with the SEC. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus and any accompanying prospectus to the extent that a statement contained herein or therein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein or therein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus or any accompanying prospectus supplement. We will provide to each person, including any beneficial owner, to whom a prospectus (or a notice of registration in lieu thereof) is delivered, a copy of any or all of the documents incorporated by reference in this prospectus or any accompanying prospectus supplement (other than an exhibit to these filings, unless the exhibit is specifically incorporated by reference in the document requested) at no cost. Any such request can be made by writing or telephoning us at the following address and telephone number:

Ryan Hochgesang
Vice President, General Counsel
EMCORE Corporation
2015 W. Chestnut Street
Alhambra, California 91803
Telephone: (626) 293-3400

FORWARD-LOOKING STATEMENTS

This prospectus, including the documents incorporated by reference, contains “forward-looking statements” within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. These forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on our current expectations and projections about future events and financial trends affecting the financial condition of our business. Such forward-looking statements include, in particular, projections about our future results included in our Exchange Act reports and statements about our plans, strategies, business prospects, changes and trends in our business and the markets in which we operate. These forward-looking statements may be identified by the use of terms and phrases such as “anticipates,” “believes,” “can,” “could,” “estimates,” “expects,” “forecasts,” “intends,” “may,” “plans,” “projects,” “should,” “targets,” “will,” “would,” and similar expressions or variations of these terms and similar phrases. Additionally, statements concerning future matters such as our expected liquidity, development of new products, enhancements or technologies, sales levels, expense levels, expectations regarding the outcome of legal proceedings and other statements regarding matters that are not historical are forward-looking statements. Management cautions that these forward-looking statements relate to future events or our future financial performance and are subject to business, economic, and other risks and uncertainties, both known and unknown, that may cause actual results, levels of activity, performance, or achievements of our business or our industry to be materially different from those expressed or implied by any forward-looking statements. Factors that could cause or contribute to such differences in results and outcomes include without limitation the following: (a) the rapidly evolving markets for the Company’s products and uncertainty regarding the development of these markets; (b) the Company’s historical dependence on sales to a limited number of customers and fluctuations in the mix of products and customers in any period; (c) delays and other difficulties in commercializing new products; (d) the failure of new products: (i) to perform as expected without material defects, (ii) to be manufactured at acceptable volumes, yields, and cost, (iii) to be qualified and accepted by our customers, and (iv) to successfully compete with products offered by our competitors; (e) uncertainties concerning the availability and cost of commodity materials and specialized product components that we do not make internally; (f) actions by competitors; (g) risks and uncertainties related to applicable laws and regulations, including the impact of changes to applicable tax laws and tariff regulations; (h) acquisition-related risks, including that (i) the revenues and net operating results obtained from the Systron Donner Inertial (“SDI”) business may not meet our expectations, (ii) the costs and cash expenditures for integration of the SDI business operations may be higher than expected, (iii) there could be losses and liabilities arising from the acquisition of SDI that we will not be able to recover from any source, and (iv) we may not realize sufficient scale in our navigation systems product line from the SDI acquisition and will need to take additional steps, including making additional acquisitions, to achieve our growth objectives for this product line; (i) risks related to our ability to obtain capital; (j) risks related to the transition of certain our manufacturing operations from our Beijing facility to a contract manufacturer’s facility; and (k) other risks and uncertainties discussed in Part I, Item 1A, Risk Factors in our most recent Annual Report on Form 10-K filed with the SEC, as such risk factors may be amended, supplemented or superseded from time to time by our subsequent periodic reports we file with the SEC, and in any prospectus supplement.

Forward-looking statements are based on certain assumptions and analysis made in light of our experience and perception of historical trends, current conditions and expected future developments as well as other factors that we believe are appropriate under the circumstances. While these statements represent our judgment on what the future may hold, and we believe these judgments are reasonable, these statements are not guarantees of any events or financial results. All forward-looking statements in this prospectus, any prospectus supplement and the documents incorporated herein and therein by reference are made as of the respective dates of such statements, based on information available to us as of such dates, and subsequent facts or circumstances may contradict, obviate, undermine, or otherwise fail to support or substantiate such statements. We caution you not to rely on these statements without also considering the risks and uncertainties associated with these statements and our business that are referred to above. We assume no obligation to update any forward-looking statement to conform such statements to actual results or to changes in our expectations, except as required by applicable law or regulation.

EMCORE CORPORATION

EMCORE Corporation was established in 1984 as a New Jersey corporation. The Company became publicly traded in 1997 and is listed on The Nasdaq Stock Market LLC under the ticker symbol EMKR. EMCORE is a leading provider of sensors for navigation in the Aerospace and Defense market as well as a manufacturer of lasers and optical subsystems for use in the cable TV industry. EMCORE pioneered the linear fiber optic transmission technology that enabled the world's first delivery of Cable TV directly on fiber, and today is a leading provider of advanced *Mixed-Signal Optics* products serving the broadband communications and Aerospace and Defense markets. The *Mixed-Signal Optics* technology at the heart of our broadband communications products is shared with our fiber optic gyros and inertial sensors to provide the aerospace and defense markets with state-of-the-art navigations systems technology. With the acquisition of SDI, a navigation systems provider with a scalable, chip-based platform for higher volume gyro applications utilizing Quartz MEMS technology, in June 2019, EMCORE further expanded its portfolio of gyros and inertial sensors with SDI's quartz MEMS gyro and accelerometer technology.

EMCORE's headquarters and principal executive offices are located at 2015 W. Chestnut Avenue, Alhambra, California, 91803, our main telephone number is (626) 293-3400 and our website is www.emcore.com. The information contained on or that can be accessed through our website does not constitute part of this prospectus, except for reports filed with the SEC that are specifically incorporated herein by reference.

RISK FACTORS

Investing in any of our securities involves significant risks. Before making an investment decision, in addition to the other information contained in or incorporated by reference in this prospectus and any prospectus supplement, you should carefully consider the specific risks set forth under the heading “Risk Factors” in our most recent Annual Report on Form 10-K filed with the SEC, as such risk factors may be amended, supplemented or superseded from time to time by other reports we file with the SEC, including subsequent Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q, and the risk factors described under the caption “Risk Factors” in any applicable prospectus supplement. See “Where You Can Find More Information” and “Information We Incorporate by Reference.” If any of these risks actually occurs, our business, results of operations and financial condition could suffer. In that case, the trading price of our securities could decline, and you could lose all or part of your investment.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of any securities covered by this prospectus as set forth in the applicable prospectus supplement. Pending any specific application, we may temporarily invest funds in short-term investments, including marketable securities.

DESCRIPTION OF CAPITAL STOCK

General

The following is a summary of the material provisions of our Restated Certificate of Incorporation, as amended (our “Certificate of Incorporation”), and By-Laws (our “Bylaws”), insofar as they relate to the material terms of our capital stock. This summary is qualified in its entirety by reference to the full text of our Certificate of Incorporation and Bylaws, which are included as exhibits to our Annual Report on Form 10-K for the fiscal year ended September 30, 2019 and filed with the SEC on December 10, 2019. Additionally, the New Jersey Business Corporation Act (the “NJBCA”) may also affect the terms of our capital stock.

Authorized Capitalization

Our authorized capital stock consists of:

- 50,000,000 shares of common stock, no par value (“Common Stock”); and
- 5,882,352 shares of preferred stock, par value \$0.0001 per share (“Preferred Stock”).

As of December 6, 2019, approximately 35.8 million shares of our Common Stock were issued, approximately 28.9 million shares of our Common Stock were issued and outstanding, and no shares of Preferred Stock were issued or outstanding.

Common Stock

Subject to the relative rights, limitations and preferences of the holders of any then outstanding Preferred Stock, holders of our Common Stock will be entitled to certain rights, including (i) to share ratably in dividends if, when and as declared by our board of directors out of funds legally available therefor and (ii) in the event of our liquidation, dissolution or winding up, to share ratably in the distribution of assets legally available therefor, after payment of debts and expenses. Each outstanding share of our Common Stock will entitle the holder to one vote on all matters submitted to a vote of the shareholders, including the election of directors, and the holders of shares of our Common Stock will possess the exclusive voting power. The holders of our Common Stock will not have cumulative voting rights in the election of directors or preemptive rights to subscribe for additional shares of our capital stock.

Holders of shares of our Common Stock will have no preference, conversion, exchange, sinking fund, redemption or appraisal rights. All outstanding shares of Common Stock are fully paid and nonassessable.

Preferred Stock

Under the terms of our Certificate of Incorporation, our board of directors has the authority, without any requirement of vote or class vote of shareholders, to issue up to 5,882,352 shares of Preferred Stock, in one or more classes or series, and to establish and designate in any such class or series of Preferred Stock such priorities, powers, preferences and relative, participating, optional or other special rights and qualifications, limitations and restrictions as it shall determine.

As of December 6, 2019, we have no outstanding shares of Preferred Stock. All shares of Preferred Stock will be, if and when issued, fully paid and nonassessable.

Anti-Takeover Effects of Our Certificate of Incorporation and Bylaw Provisions and the NJBCA

Certain provisions of our Certificate of Incorporation and Bylaws, as well as certain provisions of the NJBCA, may make it more difficult to acquire control of us by means of a tender offer, open market purchase, proxy contest or otherwise. These provisions, summarized below, are expected to discourage certain types of coercive takeover practices and takeover bids that our board of directors may consider inadequate and to encourage persons seeking to acquire control of our company to first negotiate with our board of directors. We believe that the benefits of increased protection of our ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company outweigh the disadvantages of discouraging takeover or acquisition proposals because, among other things, negotiation of these proposals could result in an improvement of their terms. For additional information, we refer you to the provisions of our Certificate of Incorporation, our Bylaws and the applicable sections of the NJBCA.

Certain Provisions of our Certificate of Incorporation and Bylaws

Certain provisions contained in our Certificate of Incorporation and Bylaws could have an anti-takeover effect. These provisions:

- provided for the classification of our board of directors into three classes, with staggered three-year terms and, until recent respective amendments to our Certificate of Incorporation and Bylaws to declassify our Board that became effective in March 2018 are fully phased in beginning with our 2021 annual meeting of shareholders, the current three-year term of certain of our directors will remain in effect until their current term expires;
- authorize the issuance by our board of directors of Preferred Stock, without any requirement of vote or class vote of shareholders, commonly referred to as “blank check” preferred stock, which shares of Preferred Stock may have rights senior to those of our Common Stock;
- do not provide for cumulative voting by shareholders in the election of directors. Under cumulative voting, a minority shareholder holding a sufficient percentage of a class of shares may be able to ensure the election of one or more directors;
- provide that directors may be removed at any time, but only for cause and only by the affirmative vote of the holders of at least a majority of our outstanding shares of capital stock entitled to vote generally in the election of directors cast at a meeting of the shareholders called for that purpose;
- provide that a supermajority vote of our shareholders is required to amend some portions of our Certificate of Incorporation and Bylaws, including requiring approval by the holders of 80% or more of the outstanding shares of our capital stock entitled to vote generally in the election of directors for certain business combinations unless these transactions meet certain fair price criteria and procedural requirements or are approved by two-thirds of our continuing directors;
- limit the persons who can call special shareholder meetings; shareholders do not have authority to call a special meeting of shareholders;
- establish advance notice requirements that must be complied with by shareholders to nominate persons for election to our board of directors or to propose matters that can be acted on by shareholders at shareholder meetings;
- provide for the filling of vacancies on our board of directors by action of 66 2/3% of the directors and not by the shareholders; and
- provide that the authorized number of directors may be changed only by resolution of the board of directors.

New Jersey Shareholders Protection Act

We are subject to NJBCA Section 14A-10A, which is also known the New Jersey Shareholders Protection Act, a type of anti-takeover statute designed to protect shareholders against coercive, unfair or inadequate tender offers and other abusive tactics and to encourage any person contemplating a business combination with us to negotiate with our Board for the fair and equitable treatment of all shareholders. Subject to certain qualifications and exceptions, the statute prohibits an interested shareholder of a corporation from effecting a business combination with the corporation for a period of five years unless the corporation’s board of directors approved the combination prior to the shareholder becoming an interested shareholder. In addition, but not in limitation of the five-year restriction, if applicable, corporations covered by the New Jersey statute may not engage at any time in a business combination with any interested shareholder of that corporation unless the combination is approved by the board of directors prior to the interested shareholder’s stock acquisition date, the combination receives the approval of two-thirds of the voting stock of the corporation not beneficially owned by the interested shareholder or the combination meets minimum financial terms specified by the statute.

An “interested stockholder” is defined to include any beneficial owner, directly or indirectly, of 10% or more of the voting power of the outstanding voting stock of the corporation and any affiliate or associate of the corporation who, within the prior five-year period, has at any time owned 10% or more of the voting power of the then outstanding stock of the corporation.

The term “business combination” is defined broadly to include, among other things:

- the merger or consolidation of the corporation with the interested shareholder or any corporation that is, or after the merger or consolidation would be, an affiliate or associate of the interested shareholder;
- the sale, lease, exchange, mortgage, pledge, transfer or other disposition to an interested shareholder or any affiliate or associate of the interested shareholder of 10% or more of the aggregate market value of the corporation’s assets; or
- the issuance or transfer to an interested shareholder or any affiliate or associate of the interested shareholder of 5% or more of the aggregate market value of the stock of the corporation.

The effect of the statute is to protect non-tendering, post-acquisition minority shareholders from mergers in which they will be “squeezed out” after the merger, by prohibiting transactions in which an acquirer could favor itself at the expense of minority shareholders. The statute generally applies to corporations that are organized under New Jersey law, and have a class of stock registered or traded on a national securities exchange or registered with the SEC pursuant to Section 12(g) of the Exchange Act.

Listing

Our Common Stock is listed on The Nasdaq Global Select Market under the trading symbol “EMKR.”

Transfer Agent and Registrar

The transfer agent and registrar for our Common Stock is American Stock Transfer & Trust Company, LLC.

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes certain general terms and provisions of the debt securities that we may offer in one or more series under this prospectus. When we offer to sell a particular series of debt securities, we will describe the specific terms of the series in a supplement to this prospectus. We will also indicate in the supplement to what extent the general terms and provisions described in this prospectus apply to a particular series of debt securities. To the extent the information contained in the prospectus supplement differs from this summary description, you should rely on the information in the prospectus supplement.

We will issue any senior debt securities under the senior indenture which we will enter into with the trustee to be named in the senior indenture. We will issue any subordinated debt securities under the subordinated indenture which we will enter into with the trustee to be named in the subordinated indenture. We have filed forms of these indentures as exhibits to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC. Unless the context requires otherwise, we use the term “indenture” to refer to both the senior indenture and the subordinated indenture, as well as to refer to any supplemental indentures that specify the terms of a particular series of debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture are identical.

The indenture will be qualified under the Trust Indenture Act of 1939. We use the term “trustee” to refer to either the senior trustee or the subordinated trustee, as applicable.

The following summary of material provisions of the senior debt securities, the subordinated debt securities and the indenture is subject to, and is qualified in its entirety by reference to, all the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplement related to the debt securities that we sell under this prospectus, as well as the complete indenture that contains the terms of the debt securities.

General

The indenture does not limit the aggregate principal amount of debt securities that may be issued thereunder. The debt securities may be issued from time to time in one or more series and the terms of each series of debt securities will be established by or pursuant to a resolution of our board of directors and set forth in an officer’s certificate or a supplemental indenture. The particular terms of each series of debt securities will be described in a prospectus supplement relating to that series (including any pricing supplement or term sheet), including the following terms, if applicable:

- the title of the debt securities;
- the price or prices (expressed as a percentage of the principal amount) at which we will sell the debt securities;
- the aggregate principal amount of the debt securities being offered and any limit on the aggregate principal amount of that series of debt securities;
- whether any of our direct or indirect subsidiaries will guarantee the debt securities, including the terms of subordination, if any, of those guarantees;
- the terms of the subordination of any series of subordinated debt securities;
- the date or dates on which the principal of the securities of the series is payable;
- the interest rate, if any, and the method for calculating the interest rate;
- the identity of the trustee;
- the dates from which interest will accrue, the interest payment dates and the record dates for the interest payments;

- the place or places where the principal of (and premium, if any) and interest on the debt securities shall be payable, where the securities of that series may be surrendered for registration of transfer or exchange, and where notices and demands to us in respect of the debt securities may be delivered;
- any mandatory or optional redemption terms;
- any obligation we have to redeem or purchase the debt securities pursuant to any sinking fund or analogous provisions or at the option of a holder of debt securities and the period or periods within which, the price or prices at which and the terms and conditions upon which securities of the series shall be redeemed or purchased, in whole or in part, pursuant to that obligation;
- any dates, if any, on which, and the price or prices at which, we will repurchase debt securities at the option of the holders of debt securities and other detailed terms and provisions of any such repurchase obligations;
- the denominations in which the debt securities will be issued;
- whether the debt securities will be issued in the form of certificated debt securities or global debt securities;
- if other than the principal amount thereof, the portion of the principal amount of the debt securities of the series that shall be payable upon declaration of acceleration of the maturity thereof;
- if the debt securities are denominated in other than United States dollars, the currency or currencies (including composite currencies) in which the debt securities are denominated;
- the designation of the currency, currencies or currency units in which payment of the principal of (and premium, if any) and interest, if any, on the debt securities of the series will be made;
- if payments of principal (and premium, if any) or interest, if any, in respect of the debt securities will be made in one or more currencies or currency units other than that or those in which the debt securities are denominated, the manner in which the exchange rate with respect to those payments will be determined;
- the manner in which the amounts of payment of principal of, or any interest on, the debt securities will be determined, if these amounts may be determined by reference to an index based on a currency or currencies or by reference to a commodity, commodity index, stock exchange index or financial index;
- any provisions relating to any security provided for the debt securities;
- any addition to, deletion of or change in the events of default described in this prospectus or in the indenture with respect to the debt securities and any change in the acceleration provisions described in this prospectus or in the indenture with respect to the debt securities;
- any addition to, deletion of or change in the covenants described in this prospectus or in the indenture with respect to the debt securities;
- any depositaries, interest rate calculation agents, exchange rate calculation agents or other agents appointed with respect to the debt securities;
- the provisions, if any, relating to conversion or exchange of any series of debt securities, including if applicable, the conversion or exchange price and period, the securities or other property into which the debt securities will be convertible, provisions as to whether conversion or exchange will be mandatory, at the option of the holders thereof or at our option, the events requiring an adjustment of the conversion price or exchange price and provisions affecting conversion or exchange if that series of debt securities is redeemed; and
- any other terms of the series of debt securities that may supplement, modify or delete any provision of the indenture as it applies to that series, including any terms that may be required under applicable law or regulations or advisable in connection with the marketing of the debt securities.

In addition, we will provide you with information on the federal income tax considerations and other special considerations applicable to any of these debt securities in the applicable prospectus supplement.

If we denominate the purchase price of any of the debt securities in a foreign currency or currencies or a foreign currency unit or units, or if the principal of and any premium and interest on any series of debt securities is payable in a foreign currency or currencies or a foreign currency unit or units, we will provide you with information on the restrictions, elections, general tax considerations, specific terms and other information with respect to that issue of debt securities and the foreign currency or currencies or foreign currency unit or units in the applicable prospectus supplement.

Transfer and Exchange

Each debt security will be represented by either one or more global securities registered in the name of The Depository Trust Company, as the depository, or a nominee of the depository (we will refer to any such debt security as a “global debt security”), or a certificate issued in definitive registered form (we will refer to any debt security represented by a certificate as a “certificated debt security”) as set forth in the applicable prospectus supplement. Except as set forth below, global debt securities will not be issuable in certificated form.

Certificated Debt Securities. You may transfer or exchange certificated debt securities at any office we maintain for this purpose in accordance with the terms of the indenture. No service charge will be made for any transfer or exchange of certificated debt securities, but we may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection with a transfer or exchange.

You may effect the transfer of certificated debt securities and the right to receive the principal of and any premium and interest on certificated debt securities only by surrendering the certificate representing those certificated debt securities and either reissuance by us or the trustee of the certificate to the new holder or the issuance by us or the trustee of a new certificate to the new holder.

Global Debt Securities and Book-Entry System. Each global debt security will be deposited with, or on behalf of, the depository, and registered in the name of the depository or a nominee of the depository. Beneficial interests in global debt securities will not be issuable in certificated form unless (i) the depository has notified us that it is unwilling or unable to continue as depository for that global debt security or has ceased to be qualified to act as such as required by the indenture and we fail to appoint a successor depository within 90 days of such event, (ii) we determine, in our sole discretion, not to have those securities represented by one or more global securities or (iii) any other circumstances shall exist, in addition to or in lieu of those described above, as may be described in the applicable prospectus supplement. Unless and until a global debt security is exchanged for certificated debt securities under the limited circumstances described in the previous sentence, a global debt security may not be transferred except as a whole by the depository to its nominee or by the nominee to the depository, or by the depository or its nominee to a successor depository or to a nominee of the successor depository.

Consolidation, Merger and Sale of Assets

The indenture generally provides that we may not consolidate with or merge with or into, sell, convey, transfer or dispose of all or substantially all of our assets to another entity, whether in one transaction or a series of related transactions, unless: (i) the resulting, surviving or transferee entity (A) is a corporation, limited liability corporation, partnership or trust organized under the laws of the United States, any state thereof or the District of Columbia, and (B) expressly assumes by a supplemental indenture all of our obligations under the debt securities and the indenture, (ii) immediately after giving effect to such transaction no Event of Default (as defined herein) and no circumstances which, after notice or lapse of time or both, would become an Event of Default, shall have happened and be continuing, and (iii) we shall have delivered to the trustee an officers’ certificate and an opinion of counsel, each stating that such consolidation, merger or transfer and such supplemental indenture comply with the indenture.

Events of Default

“*Event of Default*” means with respect to any series of debt securities, any of the following:

- default in the payment of any interest upon any debt security of that series when it becomes due and payable, and continuance of such default for a period of 30 days (unless the entire amount of the payment is deposited by us with the trustee or with a paying agent prior to the expiration of the 30-day period);

- default in the payment of principal of, or any premium on, any debt security of that series at its maturity;
- default in the performance or breach of any covenant by us in the indenture (other than defaults described above or defaults relating to a covenant that has been included in the indenture solely for the benefit of a series of debt securities other than that series), which default continues uncured for a period of 90 days after we receive written notice thereof;
- the occurrence of specified events of bankruptcy, insolvency or reorganization; and
- any other event of default provided with respect to a series of debt securities that is described in the applicable prospectus supplement.

No event of default with respect to a particular series of debt securities (except as to certain events of bankruptcy, insolvency or reorganization) necessarily constitutes an event of default with respect to any other series of debt securities. The occurrence of certain events of default or an acceleration under the indenture may constitute an event of default under certain indebtedness of ours or our subsidiaries outstanding from time to time.

If an event of default with respect to any series of debt securities at the time outstanding occurs and is continuing (other than an event of default resulting from certain events of bankruptcy, insolvency or reorganization), then the trustee or the holders of not less than 25% in principal amount of the outstanding debt securities of that series may, by a notice in writing to us (and to the trustee if given by the holders), declare to be due and payable immediately the principal of (or, if the debt securities of that series are discount securities, that portion of the principal amount as may be specified in the terms of that series) and accrued and unpaid interest, if any, on all debt securities of that series. In the case of an event of default resulting from certain events of bankruptcy, insolvency or reorganization, the principal amount (or such specified amount) of and accrued and unpaid interest, if any, on all outstanding debt securities will become and be immediately due and payable without any declaration or other act on the part of the trustee or any holder of outstanding debt securities. At any time after a declaration of acceleration with respect to debt securities of any series has been made, but before a judgment or decree for payment of the money due has been obtained by the trustee, the holders of a majority in principal amount of the outstanding debt securities of that series, by written notice to us and the trustee, may rescind and annul such declaration of acceleration and its consequences if all events of default, other than the non-payment of accelerated principal and interest, if any, with respect to debt securities of that series, have been cured or waived as provided in the indenture. We refer you to the prospectus supplement relating to any series of debt securities that are discount securities for the particular provisions relating to acceleration of a portion of the principal amount of those discount securities upon the occurrence of an event of default.

The indenture provides that the trustee will be under no obligation to perform any duty or exercise any of its rights or powers under the indenture unless the trustee receives indemnity satisfactory to it against any cost, liability or expense which might be incurred by it in performing that duty or exercising that right or power. Subject to certain rights of the trustee, the holders of a majority in principal amount of the outstanding debt securities of any series will 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 debt securities of that series.

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

- that holder has previously given to the trustee written notice of a continuing event of default with respect to debt securities of that series;
- the holders of not less than 25% in principal amount of the outstanding debt securities of that series have made written request to the trustee to institute the proceedings in respect of that event of default in its own name as trustee under the indenture;
- such holder or holders have offered to the trustee indemnity or security satisfactory to the trustee against the costs, expenses and liabilities which might be incurred by the trustee in compliance with the request;
- the trustee has failed to institute any such proceeding for 60 days after its receipt of such notice, request and offer of indemnity; and

- no direction inconsistent with the written request has been given to the trustee during that 60-day period by holders of a majority in principal amount of the outstanding debt securities of that series.

Notwithstanding any other provision in the indenture, the holder of any debt security will have an absolute and unconditional right to receive payment of the principal of, and any interest on, that debt security on or after the due dates expressed in that debt security (or, in the case of redemption, on the redemption date) and to institute suit for the enforcement of any such payment, and such rights shall not be impaired without the consent of such holder.

The indenture requires us, within 120 days after the end of our fiscal year, to furnish to the trustee a statement as to compliance with the indenture from our principal executive officer, principal financial officer or principal accounting officer. If a default or event of default occurs and is continuing with respect to the debt securities of any series and if it is actually known to a responsible officer of the trustee, the trustee shall mail to each holder of the debt securities of that series notice of a default or event of default within 90 days after it occurs or, if later, after a responsible officer of the trustee has knowledge of such default or event of default. The indenture provides that the trustee may withhold notice to the holders of debt securities of any series of any default or event of default (except in payment on any debt securities of that series) with respect to debt securities of that series if the trustee determines in good faith that withholding notice is in the interest of the holders of those debt securities.

Modification and Waiver

We and the trustee may modify and amend or supplement the indenture or the debt securities of one or more series without the consent of any holder of any debt security:

- to add guarantees with respect to debt securities of a series or secure debt securities of a series;
- to surrender any of our rights or powers under the indenture;
- to add covenants or events of default for the benefit of the holders of any series of debt securities;
- to secure the debt securities;
- to comply with the applicable rules or procedures of any applicable depository;
- to cure any ambiguity, defect or inconsistency;
- to comply with the provisions of the indenture concerning consolidations, mergers and transfers of all or substantially all of our assets;
- to provide for uncertificated securities in addition to or in place of certificated securities;
- to make any change that does not materially adversely affect the rights of any holder of that series of debt securities;
- to effect the appointment of a successor trustee with respect to the debt securities of any series and to add to or change any of the provisions of the indenture to provide for or facilitate administration by more than one trustee;
- to comply with requirements of the SEC in order to effect or maintain the qualification of the indenture under the Trust Indenture Act;
- 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;
- to provide for the issuance of and establish the form and terms and conditions of debt securities of any series as permitted by the indenture; and
- for certain other reasons set forth in any prospectus supplement.

We may also modify and amend the indenture with the consent of the holders of at least a majority in principal amount of the outstanding debt securities of each series affected by the modifications or amendments. We may not make any modification or amendment without the consent of the holders of each affected debt security then outstanding if that amendment will:

- reduce the principal amount of debt securities of that series whose holders must consent to an amendment, supplement or waiver;
- reduce the rate of or extend the time for payment of interest (including default interest) on any debt security or that series;
- reduce the principal of, or change the fixed maturity of, any debt security of that series or reduce the amount of, or postpone the date fixed for, the payment of any sinking fund or analogous obligation with respect to that series of debt securities;
- reduce the principal amount of discount securities of that series payable upon acceleration of maturity;
- waive a default in the payment of the principal of, or interest, if any, on any debt security of that series (except a rescission of acceleration of the debt securities of any series by the holders of at least a majority in principal amount of the then outstanding debt securities of that series and a waiver of the payment default that resulted from such acceleration);
- make the principal of, or any interest on, any debt security of that series payable in currency other than that stated in the debt security;
- make any change to certain provisions of the indenture relating to, among other things, (i) the right of holders of debt securities to receive payment of the principal of, and any interest on, those debt securities and to institute suit for the enforcement of any such payment and (ii) waivers or amendments; or
- waive a redemption payment with respect to any debt security of that series, provided that such redemption is made at our option.

Except for certain specified provisions, the holders of at least a majority in principal amount of the outstanding debt securities of any series may, on behalf of the holders of all debt securities of that series, by written notice to the trustee, waive our compliance with provisions of the indenture or the debt securities with respect to that series. The holders of a majority in principal amount of the outstanding debt securities of any series may, on behalf of the holders of all the debt securities of that series, waive any past default under the indenture with respect to that series and its consequences, except a default in the payment of the principal of, or any interest on, any debt security of that series; provided, however, that the holders of a majority in principal amount of the outstanding debt securities of any series may rescind an acceleration and its consequences, including any related payment default that resulted from the acceleration.

Satisfaction and Discharge of Indenture

The indenture shall cease to be of further effect with respect to a series of debt securities when either:

- we have delivered to the trustee for cancellation all outstanding debt securities of that series, other than any debt securities that have been destroyed, lost or stolen and that have been replaced or paid as provided in the indenture;
- all outstanding debt securities of that series that have not been delivered to the trustee for cancellation have become due and payable or are by their terms to become due and payable within one year or are to be called for redemption within one year under arrangements satisfactory to the trustee for the giving of notice of redemption, and we have irrevocably deposited with the trustee as trust funds the entire amount, in cash in U.S. dollars or U.S. governmental obligations, sufficient to pay at maturity or upon redemption all debt securities of that series, including principal of and any premium and interest due or to become due to such date of maturity or date fixed for redemption, as the case may be; or

- we have properly fulfilled any other means of satisfaction and discharge that may be set forth in the terms of the debt securities of that series.

In each case, we will also pay all other sums payable by us under the indenture with respect to the debt securities of that series and deliver to the trustee an opinion of counsel and an officers' certificate, each stating that all conditions precedent to satisfaction and discharge with respect to the debt securities of that series have been complied with.

Defeasance

Legal Defeasance. The indenture provides that, unless otherwise provided by the terms of the applicable series of debt securities, we may be discharged from any and all obligations in respect of the debt securities of any series (subject to certain exceptions). We will be so discharged upon the deposit with the trustee, in trust, of money and/or U.S. government obligations or, in the case of debt securities denominated in a single currency other than U.S. dollars, government obligations of the government that issued or caused to be issued such currency, that, through the payment of interest and principal in accordance with their terms, will provide money in an amount sufficient in the opinion of a nationally recognized firm of independent public accountants or investment bank to pay and discharge each installment of principal of and interest, if any, on and any mandatory sinking fund payments in respect of the debt securities of that series on the stated maturity of those payments in accordance with the terms of the indenture and those debt securities.

This discharge may occur only if, among other things, we have delivered to the trustee an opinion of counsel stating that we have received from, or there has been published by, the United States Internal Revenue Service a ruling or, since the date of execution of the indenture, there has been a change in the applicable United States federal income tax law, in either case to the effect that, and based thereon such opinion shall confirm that, the holders of the debt securities of that series will not recognize income, gain or loss for United States federal income tax purposes as a result of the deposit, defeasance and discharge and will be subject to United States federal income tax on the same amounts and in the same manner and at the same times as would have been the case if the deposit, defeasance and discharge had not occurred.

Defeasance of Certain Covenants. The indenture provides that, unless otherwise provided by the terms of the applicable series of debt securities, upon compliance with certain conditions:

- we may be released from our obligations with respect to certain covenants set forth in the indenture, as well as any additional covenants which may be set forth in the applicable prospectus supplement and supplemental indenture; and
- any omission to comply with those covenants will not constitute a default or an event of default with respect to the debt securities of that series ("covenant defeasance").

The conditions include:

- depositing with the trustee money and/or U.S. government obligations or, in the case of debt securities denominated in a single currency other than U.S. dollars, government obligations of the government that issued or caused to be issued such currency, that, through the payment of interest and principal in accordance with their terms, will provide money in an amount sufficient in the opinion of a nationally recognized firm of independent public accountants or investment bank to pay and discharge each installment of principal of and interest, if any, on and any mandatory sinking fund payments in respect of the debt securities of that series on the stated maturity of those payments in accordance with the terms of the indenture and those debt securities;
- delivering to the trustee an opinion of counsel to the effect that the holders of the debt securities of that series will not recognize income, gain or loss for United States federal income tax purposes as a result of the deposit and related covenant defeasance and will be subject to United States federal income tax on the same amounts and in the same manner and at the same times as would have been the case if the deposit and related covenant defeasance had not occurred; and
- delivering to the trustee an opinion of counsel and an officer's certificate, each stating that all conditions precedent to defeasance with respect to the debt securities of that series have been complied with.

Governing Law

The indenture and any debt securities issued thereunder will be governed by and construed in accordance with the laws of the State of New York (without regard to the conflicts of law provisions other than Section 5-1401 of the New York General Obligations Law).

Subordination of Subordinated Debt Securities

The subordinated debt securities will be subordinate and junior in priority to certain of our other indebtedness to the extent described in a prospectus supplement.

DESCRIPTION OF WARRANTS

We may issue warrants to purchase shares of our common stock, shares of our preferred stock or debt securities. We may issue warrants independently of or together with shares of our common stock, shares of our preferred stock, debt securities or other securities offered by any prospectus supplement. Warrants sold with other securities may be attached to or separate from shares of our common stock, shares of our preferred stock, debt securities or other securities. We will issue warrants under one or more warrant agreements between us and a bank or trust company, as warrant agent, that we will name in the prospectus supplement relating to the particular issue of offered warrants. The warrant agent 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 or beneficial owners of warrants.

The prospectus supplement relating to any warrants we offer will include specific terms relating to the offering. These terms may include some or all of the following:

- the title of the warrants;
- the aggregate number of warrants to be offered;
- the price or prices at which the warrants will be issued;
- the currency or currencies, including composite currencies, in which the price of the warrants may be payable;
- the designation and terms of the securities purchasable upon exercise of the warrants and the number of securities issuable upon exercise of the warrants;
- the price at which and the currency or currencies, including composite currencies, in which the securities purchasable upon exercise of the warrants may be purchased;
- the date on which the right to exercise the warrants shall commence and the date on which that right will expire;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security;
- if applicable, the terms related to any permitted adjustment in the exercise price of or number of securities covered by the warrants;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- if applicable, a discussion of any material federal income tax considerations; and
- any other terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of warrants.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the specified time on the expiration date, unexercised warrants will become void.

Warrants may be exercised as described in the applicable prospectus supplement. Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will, as soon as practicable, issue and deliver the underlying securities purchasable upon such exercise. If fewer than all of the warrants represented by a warrant certificate are exercised, we will issue a new warrant certificate for the remaining amount of warrants.

The description in the applicable prospectus supplement of any warrants we offer will not necessarily be complete and will be qualified in its entirety by reference to the applicable form of warrant agreement, including a form of warrant certificate, which will describe the terms of the series of warrants being offered and which will be filed with the SEC and incorporated by reference in the registration statement of which this prospectus is a part.

DESCRIPTION OF RIGHTS

We may issue rights for the purchase of shares of our common stock, shares of our preferred stock or debt securities. Each series of rights will be issued under a separate rights agreement to be entered into with a bank or trust company, as rights agent, all as set forth in the applicable prospectus supplement. The rights agent will act solely as our agent in connection with the certificates relating to the rights and will not assume any obligation or relationship of agency or trust with any holders of rights certificates or beneficial owners of rights.

The prospectus supplement relating to any rights we offer will describe the specific terms of those rights. These terms may include some or all of the following:

- the date for determining the persons entitled to participate in the rights distribution;
- the title and aggregate number or amount of underlying securities purchasable upon exercise of the rights and the exercise price;
- the aggregate number of rights being issued;
- the date, if any, on and after which the rights may be transferable separately;
- the date on which the right to exercise the rights will commence and the date on which the right will expire;
- the number of rights outstanding, if any;
- if applicable, a discussion of any material federal income tax considerations; and
- any other terms of the rights, including the terms, procedures and limitations relating to the distribution, exchange and exercise of the rights.

Rights will be exercisable for U.S. dollars only and will be in registered form only.

The description in the applicable prospectus supplement of any rights we offer will not necessarily be complete and will be qualified in its entirety by reference to the applicable form of rights agreement, which will describe the terms of the series of rights being offered and which will be filed with the SEC and incorporated by reference in the registration statement of which this prospectus is a part.

DESCRIPTION OF UNITS

We may issue units comprising two or more securities described in this prospectus in any combination. For example, we might issue units consisting of a combination of debt securities and warrants to purchase common stock. The following description sets forth certain general terms and provisions of the units that we may offer pursuant to this prospectus. The particular terms of the units and the extent, if any, to which the general terms and provisions may apply to the units so offered will be described in the applicable prospectus supplement.

Each unit will be issued so that the holder of the unit also is the holder of each security included in the unit. Thus, the unit will have the rights and obligations of a holder of each included security. Units will be issued pursuant to the terms of a unit agreement, which may provide that the securities included in the unit may not be held or transferred separately at any time or at any time before a specified date.

The prospectus supplement relating to any particular issuance of units we offer will describe the terms of those units. These terms may include some or all of the following:

- the designation and terms of the units and the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provision for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- whether the units will be issued in fully registered or global form.

The description in the applicable prospectus supplement of any units we offer will not necessarily be complete and will be qualified in its entirety by reference to the applicable form of unit agreement, including a form of unit certificate, which will describe the terms of the series of units being offered and which will be filed with the SEC and incorporated by reference in the registration statement of which this prospectus is a part.

PLAN OF DISTRIBUTION

We may offer and sell the securities described in this prospectus from time to time in one or more transactions, including without limitation:

- directly to one or more investors, including through a specific bidding, auction or other process;
- to investors through agents;
- directly to agents;
- to or through brokers or dealers;
- to the public through underwriting syndicates led by one or more managing underwriters;
- to one or more underwriters acting alone for resale to investors or to the public;
- through a combination of any of these methods or any other method permitted pursuant to applicable law.

In addition, the manner in which we may offer and sell some or all of the securities described in this prospectus includes, without limitation, through:

- a block trade in which a broker-dealer will attempt to sell as agent, but may position or resell a portion of the block, as principal, in order to facilitate the transaction;
- purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account;
- ordinary brokerage transactions and transactions in which a broker solicits purchasers; or
- privately negotiated transactions.

A prospectus supplement with respect to each offering of securities will set forth the terms of the offering and the method of distribution of the securities and will identify any firms acting as underwriters, dealers or agents in connection with the offering, including:

- the name or names of any underwriters, dealers or agents and the amounts of securities underwritten or purchased by each of them, if any;
- the purchase price of the securities being offered and the net proceeds to be received by us from the sale;
- any public offering price;
- any over-allotment options under which the underwriters may purchase additional securities from us;
- any delayed delivery arrangements;
- any underwriting discounts or commissions or agency fees and other items constituting compensation to underwriters, dealers or agents;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchange or markets on which the securities offered in the prospectus supplement may be listed.

The offer and sale of the securities described in this prospectus by us, the underwriters or the third parties described above may be effected from time to time in one or more transactions, including privately negotiated transactions, either:

- at a fixed price or prices, which may be changed;

- at market prices prevailing at the time of sale;
- in “at the market offerings,” within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise;
- at prices related to the prevailing market prices; or
- at negotiated prices.

In connection with the sale of the securities, underwriters, dealers or agents may be deemed to have received compensation from us in the form of underwriting discounts or commissions and also may receive commissions from securities purchasers for whom they may act as agent. Underwriters may sell the securities to or through dealers, and the dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agent.

Underwriters, dealers and agents participating in the securities distribution may be deemed to be underwriters, and any discounts and commissions they receive and any profit they realize on the resale of the securities may be deemed to be underwriting discounts and commissions under the Securities Act. Underwriters and their controlling persons, dealers and agents may be entitled, under agreements entered into with us, to indemnification against and contribution toward specific civil liabilities, including liabilities under the Securities Act.

Any securities we sell pursuant to a prospectus supplement may or may not be listed on a national securities exchange. It is possible that one or more underwriters may make a market in the securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice. No assurance can be given as to the liquidity of, or the trading market for, any offered securities.

In connection with any offering, the underwriters may purchase and sell securities in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of securities than they are required to purchase in an offering. Stabilizing transactions consist of bids or purchases made for the purpose of preventing a decline in the market price of the securities while an offering is in progress. The underwriters also may impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the underwriters have repurchased securities sold by or for the account of that underwriter in stabilizing or short-covering transactions. These activities by the underwriters may stabilize, maintain or otherwise affect the market price of the securities. As a result, the price of the securities may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued by the underwriters at any time. Underwriters may engage in over-allotment. If any underwriters create a short position in the securities in an offering in which they sell more securities than are set forth on the cover page of the applicable prospectus supplement, the underwriters may reduce that short position by purchasing the securities in the open market.

Underwriters, dealers or agents that participate in the offer of securities, or their affiliates or associates, may have engaged or engage in transactions with and perform services for, us or our affiliates in the ordinary course of business for which they may have received or receive customary fees and reimbursement of expenses.

LEGAL MATTERS

Certain legal matters relating to the issuance and sale of the securities will be passed upon for us by Connell Foley LLP.

EXPERTS

The consolidated financial statements of EMCORE Corporation as of September 30, 2019 and 2018, and for each of the years in the three-year period ended September 30, 2019, and management's assessment of the effectiveness of internal control over financial reporting as of September 30, 2019, have been incorporated by reference herein in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. The report dated December 10, 2019, on the effectiveness of internal control over financial reporting as of September 30, 2019, contains an explanatory paragraph that states management of EMCORE Corporation excluded from its assessment of the effectiveness of internal control over financial reporting Systron Donner Inertial, Inc.'s (SDI) internal control over financial reporting associated with 25% of total assets and 11% of total revenue included in the consolidated financial statements of EMCORE Corporation and subsidiaries as of and for the year ended September 30, 2019. Our report also excludes an evaluation of the internal control over financial reporting of SDI.

The financial statements of Systron Donner Inertial, Inc. appearing in EMCORE Corporation's Current Report on Form 8-K/A, dated August 23, 2019, have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon, included therein, and incorporated herein by reference. Such financial statements have been incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following is a statement of the estimated expenses, to be paid solely by the registrant, of the issuance and distribution of the securities being registered hereby:

SEC registration fee	\$	3,894
FINRA filing fee	\$	5,000
Trustee's fees and expenses		*
Transfer agent and registrar fees		*
Printing expenses		*
Accounting fees and expenses		*
Rating agency fees		*
Legal fees and expenses		*
Miscellaneous expenses		*
Total	\$	<u>8,894</u>

* These fees are calculated based on the securities offered and the number of issuances and accordingly cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers.

Section 14A:3-5 of the NJBCA provides that a corporation may indemnify a corporate agent made a party to a proceeding (other than a proceeding by or in the right of the corporation) by reason of the fact that such person was a corporate agent, against expenses and liabilities in connection with any proceeding if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal proceeding (other than a proceeding by or in the right of the corporation) has no reasonable cause to believe his or her conduct was unlawful.

The Company's Certificate of Incorporation and Bylaws include provisions (i) to reduce the personal liability of the Company's directors for monetary damage resulting from breaches of their fiduciary duty, and (ii) to permit the Company to indemnify its directors and officers to the fullest extent permitted by New Jersey law. The Company has obtained directors' and officers' liability insurance that insures such persons against the costs of defense, settlement, or payment of a judgment under certain circumstances. The Company has also entered into indemnification agreements with each of its executive officers and directors. The form of such indemnification agreement is attached as Exhibit 10.1 to the Company's Current Report on Form 8-K, filed with the SEC on December 14, 2012.

Item 16. Exhibits.

A list of exhibits included as part of this registration statement is set forth in the Exhibit Index and is incorporated herein by reference.

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 a 20% 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 the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included by 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.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - (i) 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
 - (ii) 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 that 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 in 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.
- (5) 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 the registrant's annual report pursuant to Section 13(a) or 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.
- (c) 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 Securities and Exchange Commission such indemnification is against public policy as expressed in the Act 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 whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.
- (d) 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.

EXHIBIT INDEX

Exhibit Number	Description
1.1*	Form of Underwriting Agreement
4.1	Restated Certificate of Incorporation, dated April 4, 2008, (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on April 4, 2008)
4.2	Certificate of Amendment of Restated Certificate of Incorporation, dated February 15, 2012 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on February 16, 2012)
4.3	Certificate of Amendment to the Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on March 20, 2018)
4.4	By-Laws of the Company, as amended through March 19, 2018 (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed with the SEC on March 20, 2018)
4.5	Specimen Certificate for Shares of Common Stock (incorporated by reference to Exhibit 4.1 to the Company's Annual Report on Form 10-K filed on December 6, 2017)
4.6*	Form of Certificate of Designation, Preferences and Rights for Preferred Stock (including form of preferred stock certificate)
4.7+	Form of Indenture for Senior Debt Securities
4.8+	Form of Indenture for Subordinated Debt Securities
4.9*	Form of Global Note for Senior Debt Securities
4.10*	Form of Global Note for Subordinated Debt Securities
4.11*	Form of Warrant Agreement and Warrant Certificate
4.12*	Form of Deposit Agreement and Depositary Receipt
4.13*	Form of Rights Agreement
4.14*	Form of Unit Agreement and Unit Certificate
5.1+	Opinion of Connell Foley LLP
23.1+	Consent of KPMG LLP
23.2+	Consent of Ernst & Young LLP
23.3+	Consent of Connell Foley LLP (included in Exhibit 5.1 filed herewith)
24.1+	Power of Attorney (included on signature page hereto)
25.1**	Form T-1 Statement of Eligibility and Qualification of Trustee under the Senior Indenture under the Trust Indenture Act of 1939, as amended
25.2**	Form T-1 Statement of Eligibility and Qualification of Trustee under the Subordinated Indenture under the Trust Indenture Act of 1939, as amended

+ Filed herewith.

* To be filed, if necessary, either by amendment to this registration statement or as an exhibit to a document to be incorporated by reference in this registration statement.

** To be filed, if necessary, separately under the electronic form type 305B2 pursuant to Section 305(B)(2) of the Trust Indenture Act of 1939, as amended.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 Alhambra, California, on the 6th day of January, 2020.

EMCORE CORPORATION

By: /s/ Jeffrey Rittichier
Jeffrey Rittichier
Chief Executive Officer and President

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Jeffrey Rittichier and Tom Minichiello or each of them individually, as his or her true and lawful attorney-in-fact and agent, with full powers of substitution and resubstitution, for and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including pre-effective and post-effective amendments, exhibits thereto and other documents in connection therewith) to this registration statement and any subsequent registration statement we may hereafter file with the Securities and Exchange Commission pursuant to Rule 462(b) under the Securities Act of 1933 to register additional securities in connection with this registration statement, 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, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, 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 any of them individually, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Jeffrey Rittichier</u> Jeffrey Rittichier	Chief Executive Officer, President and Director (Principal Executive Officer)	January 6, 2020
<u>/s/ Tom Minichiello</u> Tom Minichiello	Chief Financial Officer (Principal Financial and Accounting Officer)	January 6, 2020
<u>/s/ Gerald J. Fine</u> Gerald J. Fine, Ph.D.	Chairman of the Board of Directors	January 6, 2020
<u>/s/ Stephen L. Domenik</u> Stephen L. Domenik	Director	January 6, 2020
<u>/s/ Bruce Grooms</u> Bruce Grooms	Director	January 6, 2020
<u>/s/ Noel Heiks</u> Noel Heiks	Director	January 6, 2020
<u>/s/ Rex S. Jackson</u> Rex S. Jackson	Director	January 6, 2020

EMCORE CORPORATION

INDENTURE

Dated as of _____, 20

[_____]

Trustee

Senior Debt Securities

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EMCORE CORPORATION

Reconciliation and tie between Trust Indenture Act of 1939 and
Indenture, dated as of , 20

§ 310(a)(1)	7.10
(a)(2)	7.10
(a)(3)	Not Applicable
(a)(4)	Not Applicable
(a)(5)	7.10
(b)	7.10
§ 311(a)	7.11
(b)	7.11
§ 312(a)	2.7
(b)	10.3
(c)	10.3
§ 313(a)	7.6
(b)(1)	7.6
(b)(2)	7.6
(c)(1)	7.6
(d)	7.6
§ 314(a)	4.2, 10.5
(b)	Not Applicable
(c)(1)	10.4
(c)(2)	10.4
(c)(3)	Not Applicable
(d)	Not Applicable
(e)	10.5
(f)	Not Applicable
§ 315(a)	7.1
(b)	7.5
(c)	7.1
(d)	7.1
(e)	6.14
§ 316(a)	2.11
(a)(1)(A)	6.12
(a)(1)(B)	6.13
(b)	6.8
§ 317(a)(1)	6.3
(a)(2)	6.4
(b)	2.6
§ 318(a)	10.1

Note: This reconciliation and tie shall not, for any purpose, be deemed to be part of the Indenture.

Indenture dated as of _____, 20____, between EMCORE CORPORATION, a company incorporated under the laws of the State of New Jersey (“*Company*”), and _____, as trustee (“*Trustee*”).

Each party agrees as follows for the benefit of the other party and for the equal and ratable benefit of the Holders of the Securities issued under this Indenture.

ARTICLE I.
DEFINITIONS AND INCORPORATION BY REFERENCE

Section 1.1. Definitions.

“*Affiliate*” of any specified person means any other person directly or indirectly controlling or controlled by or under common control with such specified person. For the purposes of this definition, “control” (including, with correlative meanings, the terms “controlled by” and “under common control with”), as used with respect to any person, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such person, whether through the ownership of voting securities or by agreement or otherwise.

“*Agent*” means any Registrar or Paying Agent.

“*Board of Directors*” means the board of directors of the Company or any duly authorized committee thereof.

“*Board Resolution*” means a copy of a resolution certified by the Secretary or an Assistant Secretary of the Company to have been adopted by the Board of Directors or pursuant to authorization by the Board of Directors and to be in full force and effect on the date of the certification and delivered to the Trustee.

“*Business Day*” means, for a particular Series, any day except a Saturday, Sunday or any day, including a legal holiday, on which banking institutions are authorized or required by law, regulation or executive order to close in The City of New York (or in connection with any payment, the place of payment).

“*Capital Stock*” of any person means any and all shares, interests, participations, rights or other equivalents (however designated) of the equity of such person.

“*Certificated Securities*” means definitive Securities in registered non-global certificated form.

“*Company*” means the party named as such above until a successor, which duly assumes the obligations under this Indenture, replaces it and thereafter means the successor.

“*Company Order*” means a written order signed in the name of the Company by an Officer.

“*Corporate Trust Office*” means the office of the Trustee at which at any particular time its corporate trust business related to this Indenture shall be principally administered, which office at the date hereof is located at _____, _____; Attention: _____, or such other address as the Trustee may designate from time to time by notice to the Holders and the Company, or the corporate trust office of any successor Trustee at which this Indenture shall be administered (or such other address as a successor Trustee may designate from time to time by notice to the Holders of the Company).

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

“*Depository*” means, with respect to the Securities of any Series issuable or issued in whole or in part in the form of one or more Global Securities, the person designated as Depository for such Series by the Company, which Depository shall be a clearing agency registered under the Exchange Act; and if at any time there is more than one such person, “Depository” as used with respect to the Securities of any Series shall mean the Depository with respect to the Securities of such Series.

“*Discount Security*” means any Security that provides for an amount less than the stated principal amount thereof to be due and payable upon declaration of acceleration of the maturity thereof pursuant to Section 6.2.

“*Dollars*” and “\$” means the currency of The United States of America.

“*Exchange Act*” means the Securities Exchange Act of 1934, as amended.

“*Foreign Currency*” means any currency or currency unit issued by a government other than the government of The United States of America.

“*Foreign Government Obligations*” means, with respect to Securities of any Series that are denominated in a Foreign Currency, direct obligations of, or obligations guaranteed by, the government that issued or caused to be issued such currency for the payment of which obligations its full faith and credit is pledged and which are not callable or redeemable at the option of the issuer thereof.

“*GAAP*” means accounting principles generally accepted in The United States of America set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as have been approved by a significant segment of the accounting profession, which are in effect as of the date of determination.

“*Global Security*” or “*Global Securities*” means a Security or Securities, as the case may be, in the form established pursuant to Section 2.2 evidencing all or part of a Series of Securities, issued to the Depository for such Series or its nominee, and registered in the name of such Depository or nominee.

“*Holder*” or “*Securityholder*” means a person in whose name a Security is registered on the books of the Registrar.

“*Indenture*” means this Indenture as amended or supplemented from time to time and shall include the form and terms of particular Series of Securities established as contemplated hereunder.

“*interest*” means, with respect to any Security, any interest on such Security, and with respect to any Discount Security which by its terms bears interest only after Maturity, interest payable after Maturity.

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

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

“*Officer’s Certificate*” means a certificate signed by any Officer (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 legal counsel. The counsel may be an employee of or counsel to the Company. Opinions of Counsel required to be delivered under this Indenture may have qualifications customary for opinions of the type required.

“*person*” means any individual, corporation, company, voluntary association, partnership, trust, joint venture, limited liability company, unincorporated organization or government or any agency, instrumentality or political subdivision thereof.

“*principal*” of a Security means the principal of the Security plus, when appropriate, the premium, if any, on the Security.

“*Responsible Officer*” means any officer of the Trustee in its Corporate Trust Office having direct responsibility for administration of this Indenture and also means, with respect to a particular corporate trust matter, any other officer to whom any corporate trust matter is referred because of his or her knowledge of and familiarity with a particular subject and who shall have direct responsibility for the administration of this Indenture.

“*SEC*” means the Securities and Exchange Commission.

“*Securities*” means the debentures, notes or other debt instruments of the Company of any Series authenticated and delivered under this Indenture.

“*Series*” or “*Series of Securities*” means each series of debentures, notes or other debt instruments of the Company created pursuant to Sections 2.1 and 2.2 hereof.

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

“*Subsidiary*” means, with respect to any person, any corporation, partnership, joint venture, limited liability company or other business entity of which a majority of the outstanding shares of Capital Stock or other interests having the power to vote in the election of directors, managers or trustees thereof is at the time directly or indirectly owned or controlled by such person or one or more of the other Subsidiaries of such person, or a combination thereof.

“*TIA*” means the Trust Indenture Act of 1939 (15 U.S. Code §§ 77aaa-77bbb) as in effect on the date of this Indenture; provided, however, that in the event the Trust Indenture Act of 1939 is amended after such date, “*TIA*” means, to the extent required by any such amendment, the Trust Indenture Act as so amended.

“*Trustee*” means the person named as the “Trustee” in the first paragraph of this instrument 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.

“*United States*” or “*U.S.*” means The United States of America (including the states thereof and the District of Columbia), its territories and possessions and other areas subject to its jurisdiction.

“*U.S. Government Obligations*” means securities which are direct obligations of, or guaranteed by, The United States of America for the payment of which its full faith and credit is pledged and which are not callable or redeemable at the option of the issuer thereof, and shall also include a depository receipt issued by a bank or trust company as custodian with respect to any such U.S. Government Obligation or a specific payment of interest on or principal of any such U.S. Government Obligation held by such custodian for the account of the holder of a depository receipt, 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 depository receipt from any amount received by the custodian in respect of the U.S. Government Obligation evidenced by such depository receipt.

Section 1.2. Other Definitions.

TERM	DEFINED IN SECTION
“ <i>Bankruptcy Law</i> ”	6.1
“ <i>Custodian</i> ”	6.1
“ <i>Event of Default</i> ”	6.1
“ <i>Judgment Currency</i> ”	10.16
“ <i>Legal Holiday</i> ”	10.7
“ <i>mandatory sinking fund payment</i> ”	11.1

<i>“optional sinking fund payment”</i>	11.1
<i>“Paying Agent”</i>	2.5
<i>“Registrar”</i>	2.5
<i>“Required Currency”</i>	10.16
<i>“successor person”</i>	5.1

Section 1.3. Incorporation by Reference of Trust Indenture Act.

Whenever this Indenture refers to a provision of the TIA, the provision is incorporated by reference in and made a part of this Indenture. The following TIA terms used in this Indenture have the following meanings:

“Commission” means the SEC.

“indenture securities” means the Securities.

“obligor” on the indenture securities means the Company and any successor obligor upon the Securities.

All other terms used in this Indenture that are defined by the TIA, defined by TIA reference to another statute or defined by SEC rule under the TIA and not otherwise defined herein are used herein as so defined.

Section 1.4. Rules of Construction.

Unless the context otherwise requires:

- (a) a term has the meaning assigned to it;
- (b) an accounting term not otherwise defined has the meaning assigned to it in accordance with GAAP;
- (c) “or” is not exclusive;
- (d) words in the singular include the plural, and in the plural include the singular; and
- (e) provisions apply to successive events and transactions.

ARTICLE II.
THE SECURITIES

Section 2.1. Issuable in Series.

The aggregate principal amount of Securities that may be authenticated and delivered under this Indenture is unlimited. The Securities may be issued in one or more Series. All Securities of a Series shall be identical except as may be set forth or determined in the manner provided in a Board Resolution, supplemental indenture hereto or Officer’s Certificate establishing the terms of such Series. In the case of Securities of a Series to be issued from time

to time, the Board Resolution, Officer's Certificate or supplemental indenture establishing the terms thereof may provide for the method by which specified terms (such as interest rate, maturity date, record date or date from which interest shall accrue) are to be determined. Securities may differ between Series in respect of any matters, provided that all Series of Securities shall be equally and ratably entitled to the benefits of this Indenture.

Section 2.2. Establishment of Terms of Series of Securities.

At or prior to the issuance of any Securities within a Series, the following shall be established (as to the Series generally, in the case of Subsection 2.2.1 and either as to such Securities within the Series or as to the Series generally in the case of Subsections 2.2.2 through 2.2.23) by or pursuant to a Board Resolution, and set forth or determined in the manner provided in a Board Resolution, supplemental indenture hereto or Officer's Certificate:

2.2.1. the title (which shall distinguish the Securities of that particular Series from the Securities of any other Series) of the Series;

2.2.2. the price or prices (expressed as a percentage of the principal amount thereof) at which the Securities of the Series will be issued;

2.2.3. any limit upon 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 2.8, 2.9, 2.12, 3.6 or 9.6);

2.2.4. the date or dates on which the principal of the Securities of the Series is payable;

2.2.5. the rate or rates (which may be fixed or variable) per annum or, if applicable, the method used to determine such rate or rates (including, but not limited to, any commodity, commodity index, stock exchange index or financial index) at which the Securities of the Series shall bear interest, if any, the date or dates from which such interest, if any, shall accrue, the date or dates on which such interest, if any, shall commence and be payable and any regular record date for the interest payable on any interest payment date;

2.2.6. the place or places where the principal of and interest, if any, on the Securities of the Series shall be payable, where the Securities of such Series may be surrendered for registration of transfer or exchange and where notices and demands to or upon the Company in respect of the Securities of such Series and this Indenture may be delivered, and the method of such payment, if by wire transfer, mail or other means;

2.2.7. if applicable, the period or periods within which, the price or prices at which and the terms and conditions upon which the Securities of the Series must be redeemed or may be redeemed, in whole or in part, at the option of the Company;

2.2.8. the obligation, if any, of the Company to redeem or purchase the Securities of the Series pursuant to any sinking fund or analogous provisions or at the option of a Holder thereof and the period or periods within which, the price or prices at which and the terms

and conditions upon which Securities of the Series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;

2.2.9. the dates, if any, on which and the price or prices at which the Securities of the Series will be repurchased by the Company at the option of the Holders thereof and other detailed terms and provisions of such repurchase obligations;

2.2.10. if other than denominations of \$1,000 and integral multiples of \$1,000 in excess thereof, the denominations in which the Securities of the Series shall be issuable;

2.2.11. the forms of the Securities of the Series and whether the Securities will be issuable as Global Securities;

2.2.12. if other than the principal amount thereof, the portion of the principal amount of the Securities of the Series that shall be payable upon declaration of acceleration of the maturity thereof pursuant to Section 6.2;

2.2.13. the currency of denomination of the Securities of the Series, which may be Dollars or any Foreign Currency, and if such currency of denomination is a composite currency, the agency or organization, if any, responsible for overseeing such composite currency;

2.2.14. the designation of the currency, currencies or currency units in which payment of the principal of and interest, if any, on the Securities of the Series will be made;

2.2.15. if payments of principal of or interest, if any, on the Securities of the Series are to be made in one or more currencies or currency units other than that or those in which such Securities are denominated, the manner in which the exchange rate with respect to such payments will be determined;

2.2.16. the manner in which the amounts of payment of principal of or interest, if any, on the Securities of the Series will be determined, if such amounts may be determined by reference to an index based on a currency or currencies or by reference to a commodity, commodity index, stock exchange index or financial index;

2.2.17. the provisions, if any, relating to any security provided for the Securities of the Series;

2.2.18. any addition to, deletion of 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 6.2;

2.2.19. any addition to, deletion of or change in the covenants set forth in Articles IV or V which applies to Securities of the Series;

2.2.20. any Depositaries, trustees, interest rate calculation agents, exchange rate calculation agents or other agents with respect to Securities of such Series if other than those appointed herein;

2.2.21. the provisions, if any, relating to conversion or exchange of any Securities of such Series, including if applicable, the conversion or exchange price, the conversion or exchange period, the securities or other property into which the Securities will be convertible, provisions as to whether conversion or exchange will be mandatory, at the option of the Holders thereof or at the option of the Company, the events requiring an adjustment of the conversion price or exchange price and provisions affecting conversion or exchange if such Series of Securities are redeemed;

2.2.22. whether any of the Company's direct or indirect Subsidiaries will guarantee the Securities of that Series, including the terms of subordination, if any, of such guarantees; and

2.2.23. any other terms of the Series (which may supplement, modify or delete any provision of this Indenture insofar as it applies to such Series), including any terms that may be required under applicable law or regulations or advisable in connection with the marketing of Securities of that Series.

All Securities of any one Series need not be issued at the same time and may be issued from time to time, consistent with the terms of this Indenture, if so provided by or pursuant to the Board Resolution, supplemental indenture hereto or Officer's Certificate referred to above.

Section 2.3. Denominations; Provision for Payment.

The Securities of any Series shall be issuable, except as otherwise provided with respect to Securities of any Series pursuant to Section 2.2, as registered Securities in the denominations of one thousand Dollars (\$1,000) or any integral multiples of \$1,000 in excess thereof. Unless otherwise provided with respect to Securities of any Series pursuant to Section 2.2, the principal of and the interest on the Securities of any Series, if any, thereon, shall be payable in Dollars at the Corporate Trust Office of the Trustee. Unless otherwise specified pursuant to Section 2.2 with respect to any Securities of any Series, interest on the Securities of any Series shall be computed on the basis of a 360-day year consisting of twelve 30-day months.

Section 2.4. Execution and Authentication.

Two Officers shall sign the Securities for the Company by manual or facsimile signature.

If an Officer whose signature is on a Security no longer holds that office at the time the Security is authenticated, the Security shall nevertheless be valid.

A Security shall not be valid until authenticated by the manual signature of the Trustee or an authenticating agent. The signature shall be conclusive evidence that the Security has been authenticated under this Indenture.

The Trustee shall at any time, and from time to time, authenticate Securities for original issue in the principal amount provided in the Board Resolution, supplemental indenture

hereto or Officer's Certificate, upon receipt by the Trustee of a Company Order. Each Security shall be dated the date of its authentication.

The aggregate principal amount of Securities of any Series outstanding at any time may not exceed any limit upon the maximum principal amount for such Series set forth in the Board Resolution, supplemental indenture hereto or Officer's Certificate delivered pursuant to Section 2.2, except as provided in Section 2.9.

Prior to the issuance of Securities of any Series, the Trustee shall have received and (subject to Section 7.1) shall be fully protected in conclusively relying on: (a) the Board Resolution, supplemental indenture hereto or Officer's Certificate delivered pursuant to Section 2.2 establishing the form of the Securities of that Series or of Securities within that Series and the terms of the Securities of that Series or of Securities within that Series, (b) an Officer's Certificate complying with Section 9.7 (with respect to the execution of supplemental indentures) and Section 10.4, and (c) an Opinion of Counsel complying with Section 9.7 (with respect to the execution of supplemental indentures) and Section 10.4.

The Trustee shall have the right, but not the obligation, to decline to authenticate and deliver any Securities of such Series: (a) if the Trustee, being advised by counsel, determines that such action may not be taken lawfully; or (b) if the Trustee in good faith determines that such action would expose the Trustee to personal liability.

The Trustee may appoint an authenticating agent acceptable to the Company to authenticate Securities. An authenticating agent may authenticate Securities whenever the Trustee may do so. Each reference in this Indenture to authentication by the Trustee includes authentication by such agent. An authenticating agent has the same rights as an Agent to deal with the Company or an Affiliate of the Company.

Section 2.5. Registrar and Paying Agent.

The Company shall maintain, with respect to each Series of Securities, at the place or places specified with respect to such Series, an office or agency where Securities of such Series may be presented or surrendered for payment ("*Paying Agent*") and where Securities of such Series may be surrendered for registration of transfer or exchange ("*Registrar*"). The Registrar shall keep a register with respect to each Series of Securities and to their transfer and exchange (the "*Security Register*"). The Company will give prompt written notice to the Trustee of the name and address, and any change in the name or address, of each Registrar or Paying Agent. If at any time the Company shall fail to maintain any such required Registrar or Paying Agent or shall fail to furnish the Trustee with the name and address thereof, such presentations and surrenders may be made or served at the Corporate Trust Office of the Trustee, and the Company hereby appoints the Trustee as its agent to receive all such presentations and surrenders.

The Company may also from time to time designate one or more co-registrars or additional paying agents 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 obligations to maintain a Registrar or Paying Agent in each place so specified 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 name or address of any such co-registrar or additional paying agent. The term “*Registrar*” includes any co-registrar; and the term “*Paying Agent*” includes any additional paying agent. The Company or any of its Affiliates may serve as Registrar or Paying Agent.

The Company hereby appoints the Trustee as the initial Registrar and Paying Agent for each Series unless another Registrar or Paying Agent, as the case may be, is appointed prior to the time Securities of that Series are first issued.

Section 2.6. Paying Agent to Hold Money in Trust.

The Company shall require each Paying Agent other than the Trustee to agree in writing that the Paying Agent will hold in trust, for the benefit of Securityholders of any Series of Securities, or the Trustee, all money held by the Paying Agent for the payment of principal of or interest on the Securities of that Series, and will notify the Trustee in writing of any default by the Company in making any such payment. While any such default continues, the Trustee may require a Paying Agent to pay all money held by it to the Trustee. The Company at any time may require a Paying Agent to pay all money held by it to the Trustee. Upon payment over to the Trustee, the Paying Agent (if other than the Company or a Subsidiary of the Company) shall have no further liability for the money. If the Company or a Subsidiary of the Company acts as Paying Agent, it shall segregate and hold in a separate trust fund for the benefit of Securityholders of any Series of Securities all money held by it as Paying Agent. Upon any bankruptcy, reorganization or similar proceeding with respect to the Company, the Trustee shall serve as Paying Agent for the Securities.

Section 2.7. Securityholder Lists.

The Trustee shall preserve in as current a form as is reasonably practicable the most recent list available to it of the names and addresses of Securityholders of each Series of Securities and shall otherwise comply with TIA § 312(a). If the Trustee is not the Registrar, the Company shall furnish to the Trustee at least ten days before each interest payment date and at such other times as the Trustee may request in writing, within 30 days after receipt by the Company of any such request, a list, in such form and as of such date as the Trustee may reasonably require, of the names and addresses of Securityholders of each Series of Securities.

Section 2.8. Transfer and Exchange.

Where Securities of a Series are presented to the Registrar or a co-registrar with a request to register a transfer or to exchange them for an equal principal amount of Securities of the same Series, the Registrar shall register the transfer or make the exchange if its requirements for such transactions are met. To permit registrations of transfers and exchanges, the Trustee shall authenticate Securities at the Registrar’s request. No service charge shall be made for any registration of transfer or exchange (except as otherwise expressly permitted herein), but the Company may require payment of a sum sufficient to cover any transfer tax or similar governmental charge payable in connection therewith (other than any such transfer tax or similar governmental charge payable upon exchanges pursuant to Sections 2.12, 3.6 or 9.6).

Neither the Company nor the Registrar shall be required (a) to issue, register the transfer of, or exchange Securities of any Series for the period beginning at the opening of business 15 days immediately preceding the mailing of a notice of redemption of Securities of that Series selected for redemption and ending at the close of business on the day of such mailing, or (b) to register the transfer of or exchange Securities of any Series selected, called or being called for redemption as a whole or the portion being redeemed of any such Securities selected, called or being called for redemption in part.

Section 2.9. 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.

If there shall be delivered to the Company and the Trustee (a) evidence to their satisfaction of the destruction, loss or theft of any Security and (b) such security or indemnity bond as may be required by each of them to hold itself and any of its agents harmless, then, in the absence of written notice to the Company or the Trustee that such Security has been acquired by a bona fide purchaser, the Company shall execute and upon receipt of a Company Order the Trustee shall authenticate and make available for delivery, 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 2.9, 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 the Trustee) connected therewith.

Every new Security of any Series issued pursuant to this Section 2.9 in lieu of any destroyed, lost or stolen Security shall constitute an original additional contractual obligation of the Company, whether or not the 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 that Series duly issued hereunder.

The provisions of this Section 2.9 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.

Section 2.10. Outstanding Securities.

The Securities outstanding at any time are all the Securities authenticated by the Trustee except for those canceled by the Registrar and those described in this Section 2.10 as not outstanding.

If a Security is replaced pursuant to Section 2.9, it ceases to be outstanding unless the Trustee receives proof satisfactory to it that the replaced Security is held by a bona fide purchaser.

If the Paying Agent (other than the Company, a Subsidiary of the Company or an Affiliate of the Company) holds on the Maturity of Securities of a Series money sufficient to pay such Securities payable on that date, then on and after that date such Securities of the Series cease to be outstanding and interest on them ceases to accrue.

The Company may purchase or otherwise acquire the Securities, whether by open market purchases, negotiated transactions or otherwise. A Security does not cease to be outstanding because the Company or an Affiliate of the Company holds the Security.

In determining whether the Holders of the requisite principal amount of outstanding Securities have given any request, demand, authorization, direction, notice, consent or waiver hereunder, the principal amount of a Discount Security that shall be deemed to be outstanding for such purposes shall be the amount of the principal thereof that would be due and payable as of the date of such determination upon a declaration of acceleration of the Maturity thereof pursuant to Section 6.2.

Section 2.11. Treasury Securities.

In determining whether the Holders of the required principal amount of Securities of a Series have concurred in any request, demand, authorization, direction, notice, consent or waiver, Securities of a Series owned by the Company or any Affiliate of the Company shall be disregarded, except that for the purposes of determining whether the Trustee shall be protected in conclusively relying on any such request, demand, authorization, direction, notice, consent or waiver, only Securities of a Series that a Responsible Officer of the Trustee actually knows are so owned shall be so disregarded. Securities so owned which have been pledged in good faith shall not be disregarded if the pledgee establishes to the satisfaction of the Trustee the pledgee's right to deliver any such request, demand, authorization, direction, notice, consent or waiver with respect to the 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.

Section 2.12. Temporary Securities.

Until definitive Securities are ready for delivery, the Company may prepare and the Trustee shall authenticate temporary Securities upon a Company Order. Temporary Securities shall be substantially in the form of definitive Securities but may have variations that the Company considers appropriate for temporary Securities. Without unreasonable delay, the Company shall prepare and the Trustee upon receipt of a Company Order shall authenticate definitive Securities of the same Series and date of maturity in exchange for temporary Securities. Until so exchanged, temporary Securities shall have the same rights under this Indenture as the definitive Securities.

Section 2.13. Cancellation.

The Company at any time may deliver Securities to the Trustee for cancellation. The Registrar and the Paying Agent, if not the Trustee, shall forward to the Trustee any Securities surrendered to them for registration of transfer, exchange or payment. The Trustee shall cancel all Securities surrendered for transfer, exchange, payment, replacement, conversion or cancellation and shall dispose of such canceled Securities (subject to the record retention requirement of the Exchange Act and the Trustee) in accordance with its customary procedures and deliver a certificate of such cancellation to the Company upon written request of the Company. The Company may not issue new Securities to replace Securities that it has paid or delivered to the Trustee for cancellation.

Section 2.14. Defaulted Interest.

If the Company defaults in a payment of interest on a Series of Securities, it may pay the defaulted interest, plus, to the extent permitted by law, any interest payable on the defaulted interest, to the persons who are Securityholders of the Series on a subsequent special record date. The Company shall fix the record date and payment date. At least ten days before the special record date, the Company shall mail to the Trustee and to each Securityholder of the Series a notice that states the special record date, the payment date and the amount of interest to be paid. The Company may pay defaulted interest in any other lawful manner.

Section 2.15. Global Securities.

2.15.1. Terms of Securities. A Board Resolution, a supplemental indenture hereto or an Officer's Certificate shall establish whether the Securities of a Series shall be issued in whole or in part in the form of one or more Global Securities and the Depositary for such Global Security or Securities.

2.15.2. Transfer and Exchange. Notwithstanding any provisions to the contrary contained in Section 2.8 of this Indenture and in addition thereto, any Global Security shall be exchangeable pursuant to Section 2.8 of this Indenture for Securities registered in the names of Holders other than the Depositary for such Security or its nominee only if (a) such Depositary notifies the Company that it is unwilling or unable to continue as Depositary for such Global Security or if at any time such Depositary ceases to be a clearing agency registered under the Exchange Act, and, in either case, the Company fails to appoint a successor Depositary registered as a clearing agency under the Exchange Act within 90 days of such event or (b) the Company determines in its sole discretion not to have such Securities represented by one or more Global Securities and executes and delivers to the Trustee an Officer's Certificate to the effect that such Global Security shall be so exchangeable. Any Global Security that is exchangeable pursuant to the preceding sentence shall be exchangeable for Securities registered in such names as the Depositary shall direct in writing in an aggregate principal amount equal to the principal amount of the Global Security with like tenor and terms.

Except as provided in this Section 2.15.2, a Global Security may not be transferred except as a whole by the Depositary with respect to such Global Security to a nominee of such Depositary, by a nominee of such Depositary to such Depositary or another

nominee of such Depositary or by the Depositary or any such nominee to a successor Depositary or a nominee of such a successor Depositary.

2.15.3. Legend. Any Global Security issued hereunder shall bear a legend in substantially the following form:

“THIS SECURITY IS A GLOBAL SECURITY WITHIN THE MEANING OF THE INDENTURE HEREINAFTER REFERRED TO AND IS REGISTERED IN THE NAME OF THE DEPOSITARY OR A NOMINEE OF THE DEPOSITARY. THIS SECURITY IS EXCHANGEABLE FOR SECURITIES REGISTERED IN THE NAME OF A PERSON OTHER THAN THE DEPOSITARY OR ITS NOMINEE ONLY IN THE LIMITED CIRCUMSTANCES DESCRIBED IN THE INDENTURE, AND MAY NOT BE TRANSFERRED EXCEPT AS A WHOLE BY THE DEPOSITARY TO A NOMINEE OF THE DEPOSITARY, BY A NOMINEE OF THE DEPOSITARY TO THE DEPOSITARY OR ANOTHER NOMINEE OF THE DEPOSITARY, OR BY THE DEPOSITARY OR ANY SUCH NOMINEE TO A SUCCESSOR DEPOSITARY OR A NOMINEE OF SUCH A SUCCESSOR DEPOSITARY.”

2.15.4. Acts of Holders. The Depositary, as a Holder, may appoint agents and otherwise authorize participants to give or take any request, demand, authorization, direction, notice, consent, waiver or other action which a Holder is entitled to give or take under this Indenture.

2.15.5. Payments. Notwithstanding the other provisions of this Indenture, unless otherwise specified as contemplated by Section 2.2, payment of the principal of and interest, if any, on any Global Security shall be made to the Holder thereof, which in the case of a Depositary therefor will be made in accordance with its applicable procedures.

2.15.6. Consents, Declaration and Directions. The Company, the Trustee and any Agent shall treat a person as the Holder of such principal amount of outstanding Securities of such Series represented by a Global Security as shall be specified in a written statement of the Depositary or by the applicable procedures of such Depositary with respect to such Global Security, for purposes of obtaining any consents, declarations, waivers or directions required to be given by the Holders pursuant to this Indenture.

Section 2.16. CUSIP Numbers.

The Company in issuing the Securities may use “CUSIP” numbers (if then generally in use), and, if so, the Trustee shall use “CUSIP” numbers in notices of redemption as a convenience to Holders; 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 or as contained in any notice of a redemption and that reliance may be placed only on the other elements of identification printed on the Securities, and any such redemption shall not be affected by any defect in or omission of such numbers. The Trustee shall have no liability for any defect in the “CUSIP” numbers as they appear on any Security, notice or elsewhere. The Company will promptly notify the Trustee in writing of any change in the “CUSIP” numbers.

Section 2.17. Evidence of Ownership.

The Company, the Trustee and any agent of the Company or the Trustee may deem and treat the person in whose name any registered Security shall be registered upon the Security Register for such series as the absolute owner of such registered Security (whether or not such registered Security shall be overdue and notwithstanding any notation of ownership or other writing thereon) for the purpose of receiving payment of or on account of the principal of and, subject to the provisions of this Indenture, interest on such registered Security and for all other purposes; and neither the Company nor the Trustee nor any agent of the Company or the Trustee shall be affected by any notice to the contrary.

ARTICLE III.
REDEMPTION

Section 3.1. Notice to Trustee.

The Company may, with respect to any Series of Securities, reserve the right to redeem and pay the Series of Securities or may covenant to redeem and pay the Series of Securities or any part thereof prior to the Stated Maturity thereof at such time and on such terms as provided for in such Securities. If a Series of Securities is redeemable and the Company wants or is obligated to redeem prior to the Stated Maturity thereof all or part of the Series of Securities pursuant to the terms of such Securities, it shall notify the Trustee in writing of the redemption date and the principal amount of Series of Securities to be redeemed. The Company shall give the notice to the Trustee at least 45 days before the redemption date, unless a shorter period is satisfactory to the Trustee.

Section 3.2. Selection of Securities to be Redeemed.

Unless otherwise indicated for a particular Series by a Board Resolution, a supplemental indenture hereto or an Officer's Certificate, if less than all the Securities of a Series are to be redeemed, the Trustee shall select the Securities of the Series to be redeemed in any manner that the Trustee deems fair and appropriate, including selecting by lot or other method, unless otherwise required by law or applicable stock exchange requirements, subject, in the case of Global Securities, to the applicable rules and procedures of the Depositary; *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. The Trustee shall make the selection from Securities of the Series outstanding not previously called for redemption. Provisions of this Indenture that apply to Securities of a Series called for redemption also apply to portions of Securities of that Series called for redemption.

Section 3.3. Notice of Redemption.

Unless otherwise indicated for a particular Series by Board Resolution, a supplemental indenture hereto or an Officer's Certificate, at least 30 days but not more than 60 days before a redemption date, the Company shall mail a notice of redemption by first-class mail to each Holder whose Securities are to be redeemed.

The notice shall identify the Securities of the Series to be redeemed and shall state:

- (a) the redemption date;
- (b) the redemption price and the amount of accrued interest, if any, to be paid;
- (c) the name and address of the Paying Agent and, if applicable, the conversion Agent;
- (d) for convertible Securities, the conversion price;

(e) if any Global Security is being redeemed in part, the portion of the principal amount of such Global Security to be redeemed and that, after the redemption date upon surrender of such Global Security, the principal amount thereof will be decreased by the portion thereof redeemed pursuant thereto;

(f) if any Certificated Security is being redeemed in part, the portion of the principal amount of such Security to be redeemed, and that, after the redemption date, upon surrender of such Security, a new Certificated Security in principal amount equal to the unredeemed portion thereof will be issued in the name of the Holder thereof upon cancellation of the original Certificated Security;

(g) that Securities of the Series (or portion thereof) called for redemption must be surrendered to the Paying Agent to collect the redemption price;

(h) that interest on Securities of the Series called for redemption ceases to accrue on and after the redemption date unless the Company defaults in the deposit of the redemption price;

(i) the CUSIP number, if any, and state that no representation is made as to the correctness or accuracy of the CUSIP number, if any, listed in the SEC's notice or printed on the Securities; and

(j) any other information as may be required by the terms of the particular Series or the Securities of a Series being redeemed.

At the Company's request, the Trustee shall give the notice of redemption in the Company's name and at its expense, provided, however, that the Company has delivered to the Trustee, at least 15 days (unless a shorter time shall be acceptable to the Trustee) prior to the notice date, an Officer's Certificate requesting that the Trustee give such notice and setting forth the information to be stated in such notice.

Section 3.4. Effect of Notice of Redemption.

Once notice of redemption is mailed as provided in Section 3.3, Securities of a Series called for redemption become due and payable on the redemption date and at the redemption price. Except as otherwise provided in the supplemental indenture, Board Resolution

or Officer's Certificate for a Series, a notice of redemption may not be conditional. Upon surrender to the Paying Agent, such Securities shall be paid at the redemption price plus accrued interest to the redemption date other than Securities or portions of Securities called for redemption which have been delivered by the Company to the Registrar for cancellation. The Paying Agent shall return to the Company any money not required for that purpose.

Unless the Company shall default in the payment of Securities (and accrued interest) called for redemption, interest on such Securities shall cease to accrue after the redemption date. Convertible Securities called for redemption shall cease to be convertible after the close of business on the Business Day immediately preceding the redemption date, unless the Company shall default in the payment of such Securities on the redemption date, in which event the Securities shall remain convertible until paid (together with accrued interest).

Failure to give notice of redemption, or any defect in such notice to the Holder of any Security of a Series designated for redemption, in whole or in part, shall not affect the sufficiency of any notice of redemption with respect to the Holder of any other Security of such Series.

Section 3.5. Deposit of Redemption Price.

On or before 10:00 a.m., New York City time, on the redemption date, the Company shall deposit with the Paying Agent money sufficient to pay the redemption price of and accrued interest, if any, on all Securities to be redeemed on that date.

Section 3.6. Securities Redeemed in Part.

Upon surrender of a Certificated Security that is redeemed in part, the Trustee shall authenticate for the Holder a new Certificated Security of the same Series and the same maturity equal in principal amount to the unredeemed portion of the Security surrendered and concurrently cancel the surrendered Certificated Security.

ARTICLE IV.
COVENANTS

Section 4.1. Payment of Principal and Interest.

The Company covenants and agrees for the benefit of the Holders of each Series of Securities that it will duly and punctually pay the principal of and interest, if any, on the Securities of that Series in accordance with the terms of such Securities and this Indenture. On or before 10:00 a.m., New York City time, on the applicable payment date, the Company shall deposit with the Paying Agent money sufficient to pay the principal of and interest, if any, on the Securities of each Series in accordance with the terms of such Securities and this Indenture. Principal and interest shall be considered paid on the date due if the Paying Agent holds in accordance with this Indenture on that date money sufficient to pay all principal and interest then due and the Paying Agent is not prohibited from paying such money to the Holders on such date pursuant to the terms of this Indenture.

Section 4.2. Reports by Company.

(a) As long as any Securities are outstanding, the Company shall file with the Trustee, and transmit to the Holders, such information, documents and other reports, and such summaries thereof, as may be required pursuant to TIA § 314(a). All reports, information and documents referred to in this Section 4.2 will be deemed to be filed with the Trustee and transmitted to the Holders at the time such reports, information or documents are publicly filed with the SEC via the SEC's EDGAR filing system (or any successor system), it being understood that the Trustee shall have no responsibility whatsoever to determine if such filings have been made.

(b) Delivery of reports, information and documents to the Trustee under this Section 4.2 are for informational purposes only and shall not constitute a representation or warranty as to the accuracy or completeness of the reports, information and documents. The Trustee's receipt of the foregoing 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).

Section 4.3. Compliance Certificate.

To the extent any Securities of a Series are outstanding, the Company shall deliver to the Trustee, within 120 days after the end of each fiscal year of the Company, an Officer's Certificate (which need not contain the statements provided for in Section 10.4) from its principal executive officer, principal financial officer or principal accounting officer stating that a review of the activities of the Company and its Subsidiaries during the preceding fiscal year has been made under the supervision of the signing Officer with a view to determining whether the Company has kept, observed, performed and fulfilled its obligations under this Indenture, and further stating, as to such Officer signing such certificate, that to his or her knowledge the Company is not in default in the performance or observance of any of the terms, provisions and conditions hereof (or, if a Default or Event of Default shall have occurred, describing all such Defaults or Events of Default of which the Officer has knowledge). Such Officer's Certificate need not include a reference to any non-compliance that has been fully cured prior to the date as of which such certificate speaks.

Section 4.4. Stay, Extension and Usury Laws.

The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay, extension or usury law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of this Indenture or the Securities; and the Company (to the extent it may lawfully do so) hereby expressly waives all benefit or advantage of any such law and covenants that it will not, by resort to any such law, 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 has been enacted.

Section 4.5. Corporate Existence.

Subject to Article V, the Company will do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence and rights (charter and statutory); provided, however, that the Company shall not be required to preserve any such right if the Board of Directors shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Company and its Subsidiaries taken as a whole and that the loss thereof is not adverse in any material respect to the Holders.

ARTICLE V.
SUCCESSORS

Section 5.1. Consolidation, Merger and Sale of Assets.

The Company may not consolidate with or merge with or into, sell, convey, transfer or dispose of all or substantially all of its assets to any other person (a “*successor person*”), whether in one transaction or a series of related transactions, unless:

- (a) (i) the Company is the surviving corporation or (ii) the successor person (if other than the Company) (A) is a corporation, limited liability corporation, partnership or trust organized under the laws of the United States; and (B) expressly assumes, by an indenture supplemental hereto, the Company’s obligations on the Securities and under this Indenture; and
- (b) immediately after giving effect to the transaction, no Default or Event of Default shall have happened and be continuing.

The Company shall deliver to the Trustee prior to the consummation of the proposed transaction an Officer’s Certificate to the foregoing effect and an Opinion of Counsel stating that the proposed transaction and any supplemental indenture comply with Section 5.1 of this Indenture.

Notwithstanding the above, any Subsidiary of the Company may consolidate with, merge into or transfer all or part of its properties to the Company. Neither an Officer’s Certificate nor an Opinion of Counsel shall be required to be delivered in connection therewith.

Section 5.2. Successor Person Substituted.

Upon any consolidation or merger, or any sale, conveyance, transfer, or lease of all or substantially all of the assets of the Company and its Subsidiaries in accordance with Section 5.1, the successor person formed by such consolidation or into or with which the Company is merged or to which such sale, conveyance, transfer, or lease is made shall succeed to, and be substituted for, and may exercise every right and power of, the Company under this Indenture and the Securities with the same effect as if such successor person has been named as the Company herein; and, thereafter, the predecessor Company, in the case of a sale, conveyance or transfer (other than a lease), shall be released from all obligations and covenants under this Indenture and the Securities.

ARTICLE VI.
DEFAULTS AND REMEDIES

Section 6.1. Events of Default.

“*Event of Default*,” wherever used herein with respect to Securities of any Series, means any one of the following events, unless in the establishing Board Resolution, supplemental indenture or Officer’s Certificate, it is provided that such Series shall not have the benefit of said Event of Default:

- (a) failure to pay any interest on any Security of that Series when it becomes due and payable, and continuance of such default for a period of 30 days (unless the entire amount of such payment is deposited by the Company with the Trustee or with a Paying Agent prior to 10:00 a.m., New York City time, on the 30th day of such period);
- (b) failure to pay principal of any Security of that Series at its Maturity;
- (c) default in the performance or breach of any covenant of the Company in this Indenture (other than defaults pursuant to sub-clauses (a) through (c) above or defaults related to a covenant that has been included in this Indenture solely for the benefit of a Series of Securities other than that Series), which default continues uncured for a period of 90 days after there has been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 25% in principal amount of the outstanding Securities of that Series a written notice specifying such default or breach and requiring it to be remedied and stating that such notice is a “Notice of Default” hereunder;
- (d) the Company pursuant to or within the meaning of any Bankruptcy Law:
 - (i) commences a voluntary case,
 - (ii) consents to the entry of an order for relief against it in an involuntary case,
 - (iii) consents to the appointment of a Custodian of it or for all or substantially all of its property, or
 - (iv) makes a general assignment for the benefit of its creditors;
- (e) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:
 - (i) is for relief against the Company in an involuntary case,
 - (ii) appoints a Custodian of the Company or for all or substantially all of its property, or
 - (iii) orders the liquidation of the Company,

and the order or decree remains unstayed and in effect for 60 days; or

(f) any other Event of Default provided with respect to Securities of that Series, which is specified in a Board Resolution, a supplemental indenture hereto or an Officer's Certificate, in accordance with Section 2.2.18.

The term "*Bankruptcy Law*" means title 11, U.S. Code or any similar federal or state law for the relief of debtors. The term "*Custodian*" means any receiver, trustee, assignee, liquidator or similar official under any Bankruptcy Law.

A Default under one Series of Securities issued under this Indenture will not necessarily be a default under another Series of Securities under this Indenture.

The Company will, so long as any of the Securities are outstanding, deliver to the Trustee, within 30 days of becoming aware of any Default or Event of Default, an Officer's Certificate specifying such Default or Event of Default and what action the Company is taking or proposes to take with respect thereto.

Section 6.2. Acceleration of Maturity; Rescission and Annulment.

If an Event of Default with respect to Securities of any Series at the time outstanding occurs and is continuing (other than an Event of Default referred to in Section 6.1(d) or (e)) then in every such case the Trustee or the Holders of not less than 25% in principal amount of the outstanding Securities of that Series may declare the principal amount (or, if any Securities of that Series are Discount Securities, such portion of the principal amount as may be specified in the terms of such Securities) of and accrued and unpaid interest, if any, on all of the Securities of that Series 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) and accrued and unpaid interest, if any, shall become immediately due and payable. If an Event of Default specified in Section 6.1(d) or (e) shall occur, the principal amount (or specified amount) of and accrued and unpaid interest, if any, on all outstanding Securities shall *ipso facto* become and be immediately due and payable without any declaration or other act on the part of the Trustee or any Holder.

At any time after such a declaration of acceleration with respect to 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 provided, the Holders of a majority in principal amount of the outstanding Securities of that Series, by written notice to the Company and the Trustee, may rescind and annul such declaration and its consequences if all Events of Default with respect to Securities of that Series, other than the non-payment of the principal and interest, if any, of Securities of that Series which have become due solely by such declaration of acceleration, have been cured or waived as provided in Section 6.13.

No such rescission shall affect any subsequent Default.

Section 6.3. Collection of Indebtedness and Suits for Enforcement by Trustee.

The Company covenants that if

- (a) 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
- (b) default is made in the payment of principal of any Security at the Maturity thereof, or
- (c) default is made in the deposit of any sinking fund payment, if any, when and as due by the terms of a Security,

then, 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 interest and, to the extent that payment of such interest shall be legally enforceable, interest on any overdue principal and 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 the Company fails to pay such amounts forthwith upon such demand, the Trustee, in its own name and as trustee of an express trust, may institute a judicial proceeding for the collection of the sums so due and unpaid, may prosecute such proceeding to judgment or final decree and may enforce the same against the Company or any other obligor upon such Securities and collect the moneys adjudged or deemed to be payable in the manner provided by law out of the property of the Company or any other obligor upon such Securities, wherever situated.

If an Event of Default with respect to any 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 most effectual 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.

Section 6.4. Trustee May File Proofs of Claim.

In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding relating to the Company or any other obligor upon the Securities or the property of the Company or of such other obligor or their creditors, the Trustee (irrespective of whether the principal of the Securities shall then be due and payable as therein expressed or by declaration or otherwise and irrespective of whether the Trustee shall have made any demand on the Company for the payment of overdue principal or interest) shall be entitled and empowered, by intervention in such proceeding or otherwise,

(a) to file and prove a claim for the whole amount of principal and interest owing and unpaid in respect of the Securities and to file such other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and of the Holders allowed in such judicial proceeding, and

(b) 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 for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 7.7.

Nothing herein contained 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.

Section 6.5. 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, its agents and counsel, be for the ratable benefit of the Holders of the Securities in respect of which such judgment has been recovered.

Section 6.6. Application of Money Collected.

Any money or property collected by the Trustee pursuant to this Article 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 or property on account of principal 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 to the Trustee under this Indenture; and

Second: To the payment of the amounts then due and unpaid for principal of 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, according to the amounts due and payable on such Securities for principal and interest, respectively; and

Third: To the Company.

Section 6.7. 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 or trustee, or for any other remedy hereunder, unless:

- (a) such Holder has previously given written notice to the Trustee of a continuing Event of Default with respect to the Securities of that Series;
- (b) the Holders of not less than 25% in principal amount of the outstanding Securities of that Series have made written request to the Trustee to institute proceedings in respect of such Event of Default in its own name as Trustee hereunder;
- (c) such Holder or Holders have offered to the Trustee indemnity or security satisfactory to the Trustee against the costs, expenses and liabilities which might be incurred by the Trustee in compliance with such request;
- (d) the Trustee has failed to institute any such proceeding for 60 days after its receipt of such notice, request and offer of indemnity; and
- (e) 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 principal amount of the outstanding Securities of that Series;

it being understood, intended and expressly covenanted by the Holder of every Security with every other Holder and the Trustee 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 or to enforce any right under this Indenture, except in the manner herein provided and for the equal and ratable benefit of all such Holders of the applicable Series; provided, however, that the Trustee does not have an affirmative duty to ascertain whether or not such actions or forbearances are unduly prejudicial to such Holders.

Section 6.8. Unconditional Right of Holders to Receive Principal and Interest.

Notwithstanding any other provision in this Indenture, the Holder of any Security has the right, which is absolute and unconditional, to receive payment of the principal of and interest, if any, on such Security on the Maturity of such Security, including the Stated Maturity expressed in such Security (or, in the case of redemption, on the redemption date) and to institute suit for the enforcement of any such payment, and such rights shall not be impaired without the consent of such Holder.

Section 6.9. 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.

Section 6.10. Rights and Remedies Cumulative.

Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities in Section 2.9, 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, to the extent permitted by law, prevent the concurrent assertion or employment of any other appropriate right or remedy.

Section 6.11. 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 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.

Section 6.12. Control by Holders.

The Holders of a majority in 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:

- (a) such direction shall not be in conflict with any rule of law or with this Indenture;
- (b) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction;
- (c) subject to the provisions of Section 7.1, the Trustee shall have the right to decline to follow any such direction if the Trustee in good faith shall, by a Responsible Officer of the Trustee, determine that the proceeding so directed would involve the Trustee in personal liability; and
- (d) prior to taking any action as directed under this Section 6.12, the Trustee shall be entitled to indemnity satisfactory to it against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction.

Section 6.13. Waiver of Past Defaults.

The Holders of not less than a majority in 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 in the payment of the principal of or interest on any Security of such Series (provided, however, that the Holders of a majority in principal amount of the outstanding Securities of any Series may rescind an acceleration and its consequences, including any related payment default that resulted from such acceleration). 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.

Section 6.14. Undertaking for Costs.

All parties to this Indenture agree, and each Holder of any Security by his acceptance thereof shall be deemed to have agreed, that any court may in its discretion require, 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, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable attorneys' fees and expenses, against any party litigant in such suit, having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the provisions of this Section 6.14 shall not apply to any suit instituted by the Company, to any suit instituted by the Trustee, to any suit instituted by any Holder, or group of Holders, holding in the aggregate more than 10% in principal amount of the outstanding Securities of any Series, or to any suit instituted by any Holder for the enforcement of the payment of the principal of or interest on any Security on or after the Maturity of such Security, including the Stated Maturity expressed in such Security (or, in the case of redemption, on the redemption date).

ARTICLE VII.
TRUSTEE

Section 7.1. Duties of Trustee.

(a) If an Event of Default has occurred and is continuing, the Trustee shall exercise the rights and powers vested in it by this 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.

(b) Except during the continuance of an Event of Default:

(i) The Trustee need perform only those duties that are specifically set forth in this Indenture and no others.

(ii) In the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon Officer's Certificates or Opinions of Counsel

furnished to the Trustee and conforming to the requirements of this Indenture; however, in the case of any such Officer's Certificates or Opinions of Counsel which by any provisions hereof are specifically required to be furnished to the Trustee, the Trustee shall examine such Officer's Certificates and Opinions of Counsel 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).

(c) The Trustee may not be relieved from liability for its own negligent action, its own negligent failure to act or its own willful misconduct, except that:

(i) This sub-clause (c) does not limit the effect of sub-clause (b) of this Section 7.1.

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

(iii) The Trustee shall not be liable with respect to any action taken, suffered or omitted to be taken by it with respect to Securities of any Series in good faith in accordance with the direction of the Holders of a majority in principal amount of the outstanding Securities of such Series 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 in accordance with Section 6.12.

(d) Every provision of this Indenture that in any way relates to the Trustee is subject to sub-clauses (a), (b) and (c) of this Section 7.1.

(e) The Trustee may refuse to perform any duty or exercise any right or power unless it receives indemnity satisfactory to it against the costs, expenses and liabilities which might be incurred by it in performing such duty or exercising such right or power.

(f) The Trustee shall not be liable for interest on any money received by it, except as the Trustee may agree in writing with the Company. Money held in trust by the Trustee need not be segregated from other funds except to the extent required by law.

(g) No provision of this Indenture shall require the Trustee to risk its own funds or otherwise incur any financial liability in the performance of any of its duties, or in the exercise of any of its rights or powers, if adequate indemnity against such risk is not assured to the Trustee in its satisfaction.

(h) The Paying Agent, the Registrar and any authenticating agent shall be entitled to the protections and immunities as are set forth in sub-clauses (e), (f) and (g) of this Section 7.1 and in Section 7.2, each with respect to the Trustee.

Section 7.2. Rights of Trustee.

(a) The Trustee may conclusively rely on and shall be protected in acting or refraining from acting upon any document (whether in its original or facsimile form) believed by it to be genuine and to have been signed or presented by the proper person. The Trustee need not investigate any fact or matter stated in the document.

(b) Before the Trustee acts or refrains from acting, it shall be entitled to receive an Officer's Certificate or an Opinion of Counsel or both. The Trustee shall not be liable for any action it takes or omits to take in good faith in conclusive reliance on such Officer's Certificate or Opinion of Counsel.

(c) The Trustee may act through agents and shall not be responsible for the misconduct or negligence of any agent appointed with due care. No Depositary shall be deemed an agent of the Trustee and the Trustee shall not be responsible for any act or omission by any Depositary.

(d) The Trustee shall not be liable for any action it takes or omits to take in good faith which it believes to be authorized or within its rights or powers, provided that the Trustee's conduct does not constitute willful misconduct or negligence.

(e) 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.

(f) 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 of Securities 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.

(g) 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 shall incur no liability or additional liability of any kind by reason of such inquiry or investigation.

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

(i) In no event shall the Trustee be liable to any person for special, punitive, indirect, consequential or incidental loss or damage of any kind whatsoever (including

but not limited to lost profits), even if the Trustee has been advised of the likelihood of such loss or damage.

(j) The permissive right of the Trustee to take the actions permitted by this Indenture shall not be construed as an obligation or duty to do so.

(k) 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 each agent, custodian and other Person employed to act hereunder.

(l) The Trustee shall not be required to give any bond or surety in respect of the performance of its powers and duties hereunder.

(m) 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.

Section 7.3. Individual Rights of Trustee.

The Trustee in its individual or any other capacity may become the owner or pledgee of Securities and may otherwise deal with the Company or an Affiliate of the Company with the same rights it would have if it were not Trustee. Any Agent may do the same with like rights. However, the Trustee is also subject to Sections 7.10 and 7.11 hereof.

Section 7.4. Trustee's Disclaimer.

The Trustee makes no representation as to the validity or adequacy of this Indenture or the Securities, it shall not be accountable for the Company's use of the proceeds from the Securities, and it shall not be responsible for any statement in the Securities other than its authentication.

Section 7.5. Notice of Defaults.

If a Default or Event of Default occurs and is continuing with respect to the Securities of any Series and if it is actually known to a Responsible Officer of the Trustee, the Trustee shall mail to each Securityholder of the Securities of that Series notice of a Default or Event of Default within 90 days after it occurs or, if later, after a Responsible Officer of the Trustee has knowledge of such Default or Event of Default. Except in the case of a Default or Event of Default in payment of principal of or interest on any Security of any Series, the Trustee may withhold the notice if and so long as it in good faith determines that withholding the notice is in the interests of Securityholders of that Series.

Section 7.6. Reports by Trustee to Holders.

Within 60 days after each anniversary of the date of this Indenture, the Trustee shall transmit by mail to all Securityholders, as their names and addresses appear on the register

kept by the Registrar, a brief report dated as of such reporting date, in accordance with, and to the extent required under, TIA § 313.

A copy of each report at the time of its mailing to Securityholders of any Series shall be filed with the SEC and each national securities exchange on which the Securities of that Series are listed. The Company shall promptly notify the Trustee in writing when Securities of any Series are listed on any national securities exchange or of any delisting thereof.

Section 7.7. Compensation and Indemnity.

The Company shall pay to the Trustee from time to time compensation for its services as the Company and the Trustee shall from time to time agree upon in writing. The Trustee's compensation shall not be limited by any law on compensation of a trustee of an express trust. The Company shall reimburse the Trustee upon request for all reasonable out of pocket expenses incurred by it. Such expenses shall include the reasonable compensation and expenses of the Trustee's agents and counsel.

The Company shall indemnify each of the Trustee and any predecessor Trustee against any cost, expense, claim (whether asserted by the Company, a Holder or any other person) or liability (including the cost of defending itself), including taxes (other than taxes based upon, measured by or determined by the income of the Trustee), incurred by it except as set forth in the next paragraph in the performance of its duties under this Indenture as Trustee or Agent. The Trustee shall notify the Company promptly of any claim for which it may seek indemnity. Failure by the Trustee to so notify the Company shall not relieve the Company of its obligations hereunder, unless and to the extent that the Company is materially prejudiced thereby. The Company shall defend the claim and the Trustee shall cooperate in the defense. The Trustee may have one separate counsel and the Company shall pay the reasonable fees and expenses of such counsel. The Company need not pay for any settlement made without its consent, which consent will not be unreasonably withheld. This indemnification shall apply to officers, directors, employees, shareholders and agents of the Trustee.

The Company need not reimburse any expense or indemnify against any loss or liability incurred by the Trustee or by any officer, director, employee or shareholder of the Trustee through willful misconduct or negligence.

To secure the Company's payment obligations in this Section 7.7, the Trustee shall have a lien prior to the Securities of any Series on all money or property held or collected by the Trustee, except that held in trust to pay principal of and interest on particular Securities of that Series.

When the Trustee incurs expenses or renders services after an Event of Default specified in Section 6.1(f) or (g) occurs, the expenses and the compensation for the services are intended to constitute expenses of administration under any Bankruptcy Law.

The provisions of this Section 7.7 shall survive the termination of this Indenture or the resignation or removal of the Trustee.

Section 7.8. Replacement of Trustee.

A resignation or removal of the Trustee and appointment of a successor Trustee shall become effective only upon the successor Trustee's acceptance of appointment as provided in this Section 7.8.

The Trustee may resign at any time with respect to the Securities of one or more Series by so notifying the Company at least 30 days prior to the date of the proposed resignation. The Holders of a majority in principal amount of the Securities of any Series may remove the Trustee with respect to that Series by so notifying the Trustee and the Company in writing. The Company may remove the Trustee with respect to Securities of one or more Series if:

- (a) the Trustee fails to comply with Section 7.10;
- (b) the Trustee is adjudged a bankrupt or an insolvent or an order for relief is entered with respect to the Trustee under any Bankruptcy Law;
- (c) a Custodian or public officer takes charge of the Trustee or its property; or
- (d) the Trustee becomes incapable of acting.

If the Trustee resigns or is removed or if a vacancy exists in the office of Trustee for any reason, the Company shall promptly appoint a successor Trustee. Within one year after the successor Trustee takes office, the Holders of a majority in principal amount of the then outstanding Securities may appoint a successor Trustee to replace the successor Trustee appointed by the Company.

If a successor Trustee with respect to the Securities of any one or more Series does not take office within 30 days after the retiring Trustee resigns or is removed, the retiring Trustee, the Company or the Holders of at least a majority in principal amount of the Securities of the applicable Series may petition any court of competent jurisdiction for the appointment of a successor Trustee at the expense of the Company.

A successor Trustee shall deliver a written acceptance of its appointment to the retiring Trustee and to the Company. Immediately after that, the retiring Trustee shall transfer all property held by it as Trustee to the successor Trustee subject to the lien provided for in Section 7.7, the resignation or removal of the retiring Trustee shall become effective, and the successor Trustee shall have all the rights, powers and duties of the Trustee with respect to each Series of Securities for which it is acting as Trustee under this Indenture. A successor Trustee shall mail a notice of its succession to each Securityholder of each such Series. Notwithstanding replacement of the Trustee pursuant to this Section 7.8, the Company's obligations under Section 7.7 hereof shall continue for the benefit of the retiring Trustee with respect to expenses and liabilities incurred by it for actions taken or omitted to be taken in accordance with its rights, powers and duties under this Indenture prior to such replacement.

Section 7.9. Successor Trustee by Merger, Etc.

If the Trustee consolidates with, merges or converts into, or transfers all or substantially all of its corporate trust business to, another corporation, the successor corporation without any further act shall be the successor Trustee, if such successor corporation is eligible and qualified under Section 7.10.

Section 7.10. Eligibility; Disqualification.

This Indenture shall always have a Trustee who satisfies the requirements of TIA § 310(a)(1), (2) and (5). The Trustee shall always have a combined capital and surplus of at least \$25,000,000 as set forth in its most recent published annual report of condition. The Trustee shall comply with TIA § 310(b).

Section 7.11. Preferential Collection of Claims Against Company.

The Trustee is subject to TIA § 311(a), excluding any creditor relationship listed in TIA § 311(b). A Trustee who has resigned or been removed shall be subject to TIA § 311(a) to the extent indicated.

ARTICLE VIII.
SATISFACTION AND DISCHARGE; DEFEASANCE

Section 8.1. Satisfaction and Discharge of Indenture.

This Indenture shall upon Company Order cease to be of further effect (except as hereinafter provided in this Section 8.1), and the Trustee, at the expense of the Company, shall execute instruments acknowledging satisfaction and discharge of this Indenture, when

- (a) either
 - (i) all Securities theretofore authenticated and delivered (other than Securities that have been destroyed, lost or stolen and that have been replaced or paid as provided in Section 2.9) have been delivered to the Trustee for cancellation; or
 - (ii) all such Securities not theretofore delivered to the Trustee for cancellation:
 - (1) have become due and payable, or
 - (2) will become due and payable at their Stated Maturity within one year, or
 - (3) have been called for redemption or 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 (1), (2) or (3) above, has irrevocably deposited or caused to be deposited with the Trustee as trust funds in trust an amount of money or U.S. Government Obligations sufficient for the purpose of paying and discharging the entire indebtedness on such Securities not theretofore delivered to the Trustee for cancellation, for principal and interest to the date of such deposit (in the case of Securities which have become due and payable on or prior to the date of such deposit) or to the Stated Maturity or redemption date, as the case may be;

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

(c) 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 have been complied with.

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee under Section 7.7, and, if money shall have been deposited with the Trustee pursuant to sub-clause (a) of this Section 8.1, the provisions of Sections 2.5, 2.8, 2.9, 8.2 and 8.5 shall survive.

Section 8.2. Application of Trust Funds; Indemnification.

(a) Subject to the provisions of Section 8.5, all money or U.S. Government Obligations deposited with the Trustee pursuant to Section 8.1, all money and U.S. Government Obligations or Foreign Government Obligations deposited with the Trustee pursuant to Section 8.3 or 8.4 and all money received by the Trustee in respect of U.S. Government Obligations or Foreign Government Obligations deposited with the Trustee pursuant to Section 8.3 or 8.4, shall be held in trust and applied by it, in accordance with the provisions of the 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 interest for whose payment such money has been deposited with or received by the Trustee or to make mandatory sinking fund payments or analogous payments as contemplated by Sections 8.3 or 8.4.

(b) The Company shall pay and shall indemnify the Trustee against any tax, fee or other charge imposed on or assessed against U.S. Government Obligations or Foreign Government Obligations deposited pursuant to Sections 8.3 or 8.4 or the interest and principal received in respect of such obligations other than any payable by or on behalf of Holders.

(c) The Trustee shall deliver or pay to the Company from time to time upon Company Order any U.S. Government Obligations or Foreign Government Obligations or money held by it as provided in Sections 8.3 or 8.4 which, in the opinion of a nationally recognized firm of independent certified public accountants or investment bank expressed in a written certification thereof delivered to the Trustee, are then in excess of the amount thereof which then would have been required to be deposited for the

purpose for which such U.S. Government Obligations or Foreign Government Obligations or money were deposited or received. This provision shall not authorize the sale by the Trustee of any U.S. Government Obligations or Foreign Government Obligations held under this Indenture.

Section 8.3. Legal Defeasance of Securities of any Series.

Unless this Section 8.3 is otherwise specified, pursuant to Section 2.2, to be inapplicable to Securities of any Series, the Company shall be deemed to have paid and discharged the entire indebtedness on all the outstanding Securities of any Series on the 91st day after the date of the deposit referred to in sub-clause (d) hereof, and the provisions of this Indenture, as it relates to such outstanding Securities of such Series, shall no longer be in effect (and the Trustee, at the expense of the Company, shall, upon receipt of a Company Order, execute instruments acknowledging the same), except as to:

- (a) the rights of Holders of Securities of such Series to receive, from the trust funds described in sub-clause (d) hereof, (i) payment of the principal of and each installment of principal of and interest on the outstanding Securities of such Series on the Maturity of such principal or installment of principal or interest and (ii) the benefit of any mandatory sinking fund payments applicable to the Securities of such Series on the day on which such payments are due and payable in accordance with the terms of this Indenture and the Securities of such Series;
- (b) the provisions of Sections 2.5, 2.8, 2.9, 8.2, 8.3 and 8.5; and
- (c) the rights, powers, trust and immunities of the Trustee hereunder and the Company's obligations in connection therewith;

provided that, the following conditions shall have been satisfied:

- (d) the Company shall have deposited or caused to be irrevocably deposited (except as provided in Section 8.2(c)) with the Trustee as trust funds in trust for the purpose of making the following payments, specifically pledged as security for and dedicated solely to the benefit of the Holders of such Securities: (i) in the case of Securities of such Series denominated in Dollars, cash in Dollars and/or U.S. Government Obligations, or (ii) in the case of Securities of such Series denominated in a Foreign Currency (other than a composite currency), money and/or Foreign Government Obligations, which through the payment of interest and principal in respect thereof in accordance with their terms (and without reinvestment), will provide, not later than one day before the due date of any payment of money, an amount in cash, sufficient, in the opinion of a nationally recognized firm of independent public accountants or investment bank expressed in a written certification thereof delivered to the Trustee, to pay and discharge each installment of principal of and interest, if any, on and any mandatory sinking fund payments in respect of all the Securities of such Series on the dates such installments of interest or principal and such sinking fund payments are due;

(e) such deposit will not result in a breach or violation of, or constitute a default under, this Indenture or any other agreement or instrument to which the Company is a party or by which it is bound;

(f) no Default or Event of Default with respect to the Securities of such Series shall have occurred and be continuing on the date of such deposit or during the period ending on the 91st day after such date;

(g) the Company shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel to the effect that (i) the Company has received from, or there has been published by, the Internal Revenue Service a ruling, or (ii) since the date of execution of this Indenture, there has been a change in the applicable U.S. federal income tax law, in either case to the effect that, and based thereon such Opinion of Counsel shall confirm that, the Holders of the Securities of such Series will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to U.S. federal income tax on the same amount and in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge had not occurred;

(h) the Company shall have delivered to the Trustee an Officer's Certificate stating that the deposit was not made by the Company with the intent of defeating, hindering, delaying or defrauding any other creditors of the Company; and

(i) the Company shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that all conditions precedent provided for relating to the defeasance contemplated by this Section 8.3 have been complied with.

Section 8.4. Covenant Defeasance.

Unless this Section 8.4 is otherwise specified pursuant to Section 2.2 to be inapplicable to Securities of any Series, the Company may omit to comply with respect to the Securities of any Series with any term, provision or condition set forth under Sections 4.2 and 4.3, 4.4 and 5.1 as well as any additional covenants specified in a supplemental indenture for such Series of Securities or a Board Resolution or an Officer's Certificate delivered pursuant to Section 2.2 (and the failure to comply with any such covenants shall not constitute a Default or Event of Default with respect to such Series under Section 6.1) and the occurrence of any event specified in a supplemental indenture for such Series of Securities or a Board Resolution or an Officer's Certificate delivered pursuant to Section 2.2.18 and designated as an Event of Default shall not constitute a Default or Event of Default hereunder, with respect to the Securities of such Series, provided that the following conditions shall have been satisfied:

(a) With reference to this Section 8.4, the Company has deposited or caused to be irrevocably deposited (except as provided in Section 8.2(c)) with the Trustee as trust funds in trust for the purpose of making the following payments specifically pledged as security for, and dedicated solely to, the benefit of the Holders of such Securities: (i) in the case of Securities of such Series denominated in Dollars, cash in Dollars and/or U.S. Government Obligations, or (ii) in the case of Securities of such Series denominated in a

Foreign Currency (other than a composite currency), money and/or Foreign Government Obligations, which through the payment of interest and principal in respect thereof in accordance with their terms (and without reinvestment), will provide, not later than one day before the due date of any payment of money, an amount in cash, sufficient, in the opinion of a nationally recognized firm of independent certified public accountants or investment bank expressed in a written certification thereof delivered to the Trustee, to pay and discharge each installment of principal of and interest, if any, on and any mandatory sinking fund payments in respect of the Securities of such Series on the dates such installments of interest or principal and such sinking fund payments are due;

(b) Such deposit will not result in a breach or violation of, or constitute a default under, this Indenture or any other agreement or instrument to which the Company is a party or by which it is bound;

(c) No Default or Event of Default with respect to the Securities of such Series shall have occurred and be continuing on the date of such deposit;

(d) The Company shall have delivered to the Trustee an Opinion of Counsel to the effect that Holders of the Securities of such Series will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such deposit and covenant defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such deposit and covenant defeasance had not occurred;

(e) The Company shall have delivered to the Trustee an Officer's Certificate stating the deposit was not made by the Company with the intent of defeating, hindering, delaying or defrauding any other creditors of the Company; and

(f) The Company shall have 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 covenant defeasance contemplated by this Section 8.4 have been complied with.

Section 8.5. Repayment to Company.

Subject to applicable abandoned property law, the Trustee and the Paying Agent shall pay to the Company upon request any money held by them for the payment of principal or interest that remains unclaimed for two years after such principal or interest has become due and payable. After that, Securityholders entitled to the money must look to the Company for payment as general creditors unless an applicable abandoned property law designates another person.

Section 8.6. Reinstatement.

If the Trustee or the Paying Agent is unable to apply any money deposited with respect to Securities of any Series in accordance with Section 8.1 by reason of any legal proceeding or by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, the obligations of the Company

under this Indenture with respect to the Securities of such Series and under the Securities of such Series shall be revived and reinstated as though no deposit had occurred pursuant to Section 8.1 until such time as the Trustee or the Paying Agent is permitted to apply all such money in accordance with Section 8.1; provided, however, that if the Company has made any payment of principal of or interest on any Securities because of the reinstatement of its obligations, the Company shall be subrogated to the rights of the Holders of such Securities to receive such payment from the money or U.S. Government Obligations held by the Trustee or Paying Agent after payment in full to the Holders.

ARTICLE IX.
AMENDMENTS AND WAIVERS

Section 9.1. Without Consent of Holders.

The Company and the Trustee may amend or supplement this Indenture or the Securities of one or more Series without the consent of any Securityholder:

- (a) to add guarantees with respect to any Series of Securities or secure any Series of Securities;
- (b) to surrender any of the Company's rights or powers under this Indenture;
- (c) to add covenants or Events of Default for the benefit of the Securityholders of any Series of Securities;
- (d) to comply with the applicable rules or procedures of the Depositary;
- (e) to cure any ambiguity, defect or inconsistency, as described in the Officer's Certificate delivered pursuant to Section 10.4;
- (f) to comply with Article V;
- (g) to provide for uncertificated Securities in addition to or in place of certificated Securities;
- (h) to make any change that does not materially adversely affect the rights of any Securityholder;
- (i) to provide for the issuance of and establish the form and terms and conditions of Securities of any Series as permitted by this Indenture;
- (j) 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;
- (k) to comply with requirements of the SEC in order to effect or maintain the qualification of this Indenture under the TIA;

(l) 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

(m) to change or eliminate any of the provisions of this Indenture, *provided* that any such change or elimination shall not be effective with respect to any outstanding Securities of any Series created prior to the execution of such supplemental indenture which is entitled to the benefit of such provision.

Section 9.2. With Consent of Holders.

The Company and the Trustee may enter into a supplemental indenture with the written consent of the Holders of at least a majority in 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 offer for the Securities of such Series), for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of any supplemental indenture or of modifying in any manner the rights of the Securityholders of each such Series. Except as provided in Section 6.13, the Holders of at least a majority in principal amount of the outstanding Securities of any Series by written notice to the Trustee (including consents obtained in connection with a tender offer or exchange offer for the Securities of such Series) may waive compliance by the Company with any provision of this Indenture or the Securities with respect to such Series.

It shall not be necessary for the consent of the Holders of Securities under this Section 9.2 to approve the particular form of any proposed supplemental indenture or waiver, but it shall be sufficient if such consent approves the substance thereof. After a supplemental indenture or waiver under this Section 9.2 becomes effective, the Company shall mail to the Holders of Securities affected thereby, a notice briefly describing the supplemental indenture or waiver. Any failure by the Company to mail or publish such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such supplemental indenture or waiver.

Section 9.3. Limitations.

Without the consent of each Securityholder affected, an amendment or waiver may not:

- (a) reduce the principal amount of Securities whose Holders must consent to an amendment, supplement or waiver;
- (b) reduce the rate of or extend the time for payment of interest (including default interest) on any Security or that Series;
- (c) reduce the principal of, or change the Stated Maturity of, any Security or reduce the amount of, or postpone the date fixed for, the payment of any sinking fund or analogous obligation;
- (d) reduce the principal amount of Discount Securities payable upon acceleration of the maturity thereof;

(e) waive a Default or Event of Default in the payment of the principal of or interest, if any, on any Security (except a rescission of acceleration of the Securities of any Series by the Holders of at least a majority in principal amount of the then outstanding Securities of such Series and a waiver of the payment default that resulted from such acceleration);

(f) make the principal of or interest, if any, on any Security payable in any currency other than that stated in the Security;

(g) make any change in Sections 6.8 or 6.13 or this Section 9.3; or

(h) waive a redemption payment with respect to any Security.

Section 9.4. Compliance with Trust Indenture Act.

Every amendment to this Indenture or the Securities of one or more Series shall be set forth in a supplemental indenture hereto that complies with the TIA as then in effect.

Section 9.5. Revocation and Effect of Consents.

Until an amendment is set forth in a supplemental indenture or a waiver becomes effective, a consent to it by a Holder of a Security is a continuing consent by the Holder and every subsequent Holder of a Security or portion of a Security that evidences the same debt as the consenting Holder's Security, even if notation of the consent is not made on any Security.

Any amendment or waiver once effective shall bind every Securityholder of each Series affected by such amendment or waiver unless it is of the type described in any of sub-clauses (a) through (h) of Section 9.3. In that case, the amendment or waiver shall bind each Holder of a Security who has consented to it and every subsequent Holder of a Security or portion of a Security that evidences the same debt as the consenting Holder's Security.

The Company may, but shall not be obligated to, fix a record date for the purpose of determining the Holders entitled to give their consent or take any other action described above or required or permitted to be taken pursuant to this Indenture. If a record date is fixed, then notwithstanding the immediately preceding paragraph, those Persons who were Holders at such record date (or their duly designated proxies), and only those persons, shall be entitled to give such consent or to revoke any consent previously given or take any such action, whether or not such Persons continue to be Holders after such record date. No such consent shall be valid or effective for more than 120 days after such record date.

Section 9.6. Notation on or Exchange of Securities.

The Company or the Trustee may place an appropriate notation about an amendment or waiver on any Security of any Series thereafter authenticated. The Company in exchange for Securities of that Series may issue and the Trustee shall authenticate upon request new Securities of that Series that reflect the amendment or waiver.

Section 9.7. Trustee Protected.

In executing, or accepting the additional trusts created by, any supplemental indenture permitted by this Article or the modifications thereby of the trusts created by this Indenture, the Trustee shall receive, and (subject to Section 7.1) shall be fully protected in conclusively relying upon, an Officer's Certificate or an Opinion of Counsel or both complying with Section 10.4 and stating that the supplemental indenture is the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, subject to customary exceptions. The Trustee shall sign all supplemental indentures upon delivery of such an Officer's Certificate or Opinion of Counsel or both, except that the Trustee need not sign any supplemental indenture that, in its sole discretion, adversely affects its rights.

ARTICLE X.
MISCELLANEOUS

Section 10.1. Trust Indenture Act Controls.

If any provision of this Indenture limits, qualifies, or conflicts with another provision which is required or deemed to be included in this Indenture by the TIA, such required or deemed provision shall control.

Section 10.2. Notices.

Any request, demand, notice or communication by the Company or the Trustee to the other, or by a Holder to the Company or the Trustee, is duly given if in writing and delivered in person or mailed by first-class mail:

if to the Company:

EMCORE Corporation
2015 W. Chestnut Street
Alhambra, California 91803
Attention: Ryan Hochgesang, Vice President & General Counsel
Telephone: (626) 293-3400

if to the Trustee:

Attention: _____

The Company or the Trustee by notice to the other may designate additional or different addresses for subsequent notices or communications.

Any notice or communication to a Securityholder shall be mailed by first-class mail to his address shown on the register kept by the Registrar. Failure to mail a notice or

communication to a Securityholder of any Series or any defect in it shall not affect its sufficiency with respect to other Securityholders of that or any other Series.

If a notice or communication is mailed or published in the manner provided above, within the time prescribed, it is duly given, whether or not the Securityholder receives it.

If the Company mails a notice or communication to Securityholders, it shall mail a copy to the Trustee and each Agent at the same time.

Notwithstanding any other provision of this Indenture or any Security, where this Indenture or any Security provides for notice of any event (including any notice of redemption) to a Holder of a Global Security (whether by mail or otherwise), such notice shall be sufficiently given to the Depositary for such Security (or its designee) pursuant to the customary procedures of such Depositary.

Section 10.3. Communication by Holders with Other Holders.

Securityholders of any Series may communicate pursuant to TIA § 312(b) with other Securityholders of that Series or any other Series with respect to their rights under this Indenture or the Securities of that Series or all Series. The Company, the Trustee, the Registrar and anyone else shall have the protection of TIA § 312(c).

Section 10.4. Certificate and Opinion as to Conditions Precedent.

Upon any request or application by the Company to the Trustee to take any action under this Indenture, the Company shall furnish to the Trustee:

- (a) an Officer's Certificate stating that, in the opinion of the signers, all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with; and
- (b) an Opinion of Counsel stating that, in the opinion of such counsel, all such conditions precedent have been complied with.

Section 10.5. Statements Required in Certificate or Opinion.

Each certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture (other than a certificate provided pursuant to TIA § 314(a)(4)) shall comply with the provisions of TIA § 314(e) and shall include:

- (a) a statement that the person making such certificate or opinion has read such covenant or condition;
- (b) 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;

(c) a statement that, in the opinion of such person, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been complied with; and

(d) a statement as to whether or not, in the opinion of such person, such condition or covenant has been complied with.

Section 10.6. Rules by Trustee and Agents.

The Trustee may make reasonable rules for action by or a meeting of Securityholders of one or more Series. Any Agent may make reasonable rules and set reasonable requirements for its functions.

Section 10.7. Legal Holidays.

Unless otherwise provided by Board Resolution, Officer's Certificate or supplemental indenture hereto for a particular Series, a "*Legal Holiday*" is any day that is not a Business Day. If a payment date is a Legal Holiday at a place of payment, payment may be made at that place on the next succeeding day that is not a Legal Holiday, and no interest shall accrue for the intervening period.

Section 10.8. No Recourse Against Others.

A director, officer, employee or stockholder (past or present), as such, of the Company shall not have any liability for any obligations of the Company under the Securities or this Indenture or for any claim based on, in respect of or by reason of such obligations or their creation. Each Securityholder by accepting a Security waives and releases all such liability. The waiver and release are part of the consideration for the issue of the Securities.

Section 10.9. Counterparts.

This Indenture may be executed in any number of counterparts and by the parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. The exchange of copies of this Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Indenture as to the parties hereto and may be used in lieu of the original Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes.

Section 10.10. Governing Law; Jury Trial Waiver.

THIS INDENTURE AND THE SECURITIES, INCLUDING ANY CLAIM OR CONTROVERSY ARISING OUT OF OR RELATING TO THIS INDENTURE OR THE SECURITIES, SHALL BE GOVERNED BY THE LAWS OF THE STATE OF NEW YORK (WITHOUT REGARD TO THE CONFLICTS OF LAWS PROVISIONS THEREOF OTHER THAN SECTION 5-1401 OF THE GENERAL OBLIGATIONS LAW).

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 ARISING OUT OF OR RELATING TO THIS INDENTURE, THE SECURITIES OR THE TRANSACTION CONTEMPLATED HEREBY.

Section 10.11. No Adverse Interpretation of Other Agreements.

This Indenture may not be used to interpret another indenture, loan or debt agreement of the Company or a Subsidiary of the Company. Any such indenture, loan or debt agreement may not be used to interpret this Indenture.

Section 10.12. Successors.

All agreements of the Company in this Indenture and the Securities shall bind its successor. All agreements of the Trustee in this Indenture shall bind its successor.

Section 10.13. Severability.

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.

Section 10.14. Table of Contents, Headings, Etc.

The Table of Contents, Cross Reference Table, and headings of the Articles and Sections of this Indenture have been inserted for convenience of reference only, are not to be considered a part hereof, and shall in no way modify or restrict any of the terms or provisions hereof.

Section 10.15. Securities in a Foreign Currency.

Unless otherwise specified in a Board Resolution, a supplemental indenture hereto or an Officer's Certificate delivered pursuant to Section 2.2 of this Indenture with respect to a particular Series of Securities, whenever for purposes of this Indenture any action may be taken by the Holders of a specified percentage in aggregate principal amount of Securities of all Series or all Series affected by a particular action at the time outstanding and, at such time, there are outstanding Securities of any Series which are denominated in more than one currency, then the principal amount of Securities of such Series which shall be deemed to be outstanding for the purpose of taking such action shall be determined by converting any such other currency into a currency that is designated upon issuance of any particular Series of Securities. Unless otherwise specified in a Board Resolution, a supplemental indenture hereto or an Officer's Certificate delivered pursuant to Section 2.2 of this Indenture with respect to a particular Series of Securities, such conversion shall be at the spot rate for the purchase of the designated currency as published in The Financial Times in the "Currency Rates" section (or, if The Financial Times is no longer published, or if such information is no longer available in The Financial Times, such source as may be selected in good faith by the Company) on any date of determination. The provisions of this paragraph shall apply in determining the equivalent principal amount in respect

of Securities of a Series denominated in currency other than Dollars in connection with any action taken by Holders of Securities pursuant to the terms of this Indenture.

All decisions and determinations provided for in the preceding paragraph shall, in the absence of manifest error, to the extent permitted by law, be conclusive for all purposes and irrevocably binding upon the Trustee and all Holders.

Section 10.16. Judgment Currency.

The Company agrees, to the fullest extent that it may effectively do so under applicable law, that (a) if for the purpose of obtaining judgment in any court it is necessary to convert the sum due in respect of the principal of or interest or other amount on the Securities of any Series (the “*Required Currency*”) into a currency in which a judgment will be rendered (the “*Judgment Currency*”), the rate of exchange used shall be the rate at which in accordance with normal banking procedures the Trustee could purchase in The City of New York the Required Currency with the Judgment Currency on the day on which final unappealable judgment is entered, unless such day is not a Business Day, then the rate of exchange used shall be the rate at which in accordance with normal banking procedures the Trustee could purchase in The City of New York the Required Currency with the Judgment Currency on the Business Day preceding the day on which final unappealable judgment is entered and (b) its obligations under this Indenture to make payments in the Required Currency (i) shall not be discharged or satisfied by any tender, or any recovery pursuant to any judgment (whether or not entered in accordance with subsection (a)), in any currency other than the Required Currency, except to the extent that such tender or recovery shall result in the actual receipt, by the payee, of the full amount of the Required Currency expressed to be payable in respect of such payments, (ii) shall be enforceable as an alternative or additional cause of action for the purpose of recovering in the Required Currency the amount, if any, by which such actual receipt shall fall short of the full amount of the Required Currency so expressed to be payable, and (iii) shall not be affected by judgment being obtained for any other sum due under this Indenture.

Section 10.17. Force Majeure.

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 best efforts which are consistent with accepted practices in the banking industry to resume performance as soon as practicable under the circumstances.

Section 10.18. U.S.A. Patriot Act.

The parties hereto acknowledge that in accordance with Section 326 of the U.S.A. Patriot Act, the Trustee, like all financial institutions and in order to help fight the funding of terrorism and money laundering, is required to obtain, verify, and record information that identifies each person or legal entity that establishes a relationship or opens an account with the

Trustee. The parties to this Indenture agree that they will provide the Trustee with such information as it may request in order for the Trustee to satisfy the requirements of the U.S.A. Patriot Act.

ARTICLE XI. SINKING FUNDS

Section 11.1. Applicability of Article.

The provisions of this Article shall be applicable to any sinking fund for the retirement of the Securities of a Series if so provided by the terms of such Securities pursuant to Section 2.2 and except as otherwise permitted or required by any form of Security of such Series issued pursuant to this Indenture.

The minimum amount of any sinking fund payment provided for by the terms of the Securities of any Series is herein referred to as a “*mandatory sinking fund payment*” and any other amount provided for by the terms of Securities of such Series is herein referred to as an “*optional sinking fund payment*.” If provided for by the terms of Securities of any Series, the cash amount of any sinking fund payment may be subject to reduction as provided in Section 11.2. Each sinking fund payment shall be applied to the redemption of Securities of any Series as provided for by the terms of the Securities of such Series.

Section 11.2. Satisfaction of Sinking Fund Payments with Securities.

The Company may, in satisfaction of all or any part of any sinking fund payment with respect to the Securities of any Series to be made pursuant to the terms of such Securities (a) deliver outstanding Securities of such Series to which such sinking fund payment is applicable (other than any of such Securities previously called for mandatory sinking fund redemption) and (b) apply as credit Securities of such Series to which such sinking fund payment is applicable and which have been repurchased by the Company or redeemed either at the election of the Company pursuant to the terms of the Securities of such Series (except pursuant to any mandatory sinking fund) or through the application of permitted optional sinking fund payments or other optional redemptions pursuant to the terms of such Securities, provided that such Securities have not been previously so credited. Such Securities shall be received by the Trustee, together with an Officer’s Certificate with respect thereto, not later than 15 days prior to the date on which the Trustee begins the process of selecting Securities for redemption, and shall be credited for such purpose by the Trustee at the price specified in such Securities for redemption through operation of the sinking fund and the amount of such sinking fund payment shall be reduced accordingly. If as a result of the delivery or credit of Securities in lieu of cash payments pursuant to this Section 11.2, the principal amount of Securities of such Series to be redeemed in order to exhaust the aforesaid cash payment shall be less than \$100,000, the Trustee need not call Securities of such Series for redemption, except upon receipt of a Company Order that such action be taken, and such cash payment shall be held by the Trustee or a Paying Agent and applied to the next succeeding sinking fund payment, provided, however, that the Trustee or such Paying Agent shall from time to time upon receipt of a Company Order pay over and deliver to the Company any cash payment so being held by the Trustee or such Paying Agent upon delivery by the Company to the Trustee of Securities of that Series purchased by the

Company having an unpaid principal amount equal to the cash payment required to be released to the Company.

Section 11.3. Redemption of Securities for Sinking Fund.

Not less than 45 days (unless otherwise indicated in the Board Resolution, supplemental indenture hereto or Officer's Certificate in respect of a particular Series of Securities) prior to each sinking fund payment date for any Series of Securities, the Company will deliver to the Trustee an Officer's Certificate specifying the amount of the next ensuing mandatory sinking fund payment for that Series pursuant to the terms of that Series, 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 of Securities of that Series pursuant to Section 11.2, and the optional amount, if any, to be added in cash to the next ensuing mandatory sinking fund payment, and the Company shall thereupon be obligated to pay the amount therein specified. Not less than 30 days (unless otherwise indicated in the Board Resolution, Officer's Certificate or supplemental indenture in respect of a particular Series of Securities) before each such sinking fund payment date the Trustee shall select the Securities to be redeemed upon such sinking fund payment date in the manner specified in Section 3.2 and 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 3.3. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Sections 3.4, 3.5 and 3.6.

[Signature page follows]

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

EMCORE CORPORATION, as Issuer

By: _____
Name:
Its:

, as Trustee

By: _____
Name:
Its:

EMCORE CORPORATION

INDENTURE

Dated as of , 20

[]

Trustee

Subordinated Securities

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EMCORE CORPORATION

Reconciliation and tie between Trust Indenture Act of 1939 and
Indenture, dated as of , 20

§ 310(a)(1)	7.10
(a)(2)	7.10
(a)(3)	Not Applicable
(a)(4)	Not Applicable
(a)(5)	7.10
(b)	7.10
§ 311(a)	7.11
(b)	7.11
§ 312(a)	2.7
(b)	10.3
(c)	10.3
§ 313(a)	7.6
(b)(1)	7.6
(b)(2)	7.6
(c)(1)	7.6
(d)	7.6
§ 314(a)	4.2, 10.5
(b)	Not Applicable
(c)(1)	10.4
(c)(2)	10.4
(c)(3)	Not Applicable
(d)	Not Applicable
(e)	10.5
(f)	Not Applicable
§ 315(a)	7.1
(b)	7.5
(c)	7.1
(d)	7.1
(e)	6.14
§ 316(a)	2.11
(a)(1)(A)	6.12
(a)(1)(B)	6.13
(b)	6.8
§ 317(a)(1)	6.3
(a)(2)	6.4
(b)	2.6
§ 318(a)	10.1

Note: This reconciliation and tie shall not, for any purpose, be deemed to be part of the Indenture.

Indenture dated as of _____, 20____, between EMCORE CORPORATION, a company incorporated under the laws of the State of New Jersey (“*Company*”), and _____, as trustee (“*Trustee*”).

Each party agrees as follows for the benefit of the other party and for the equal and ratable benefit of the Holders of the Securities issued under this Indenture.

ARTICLE I.
DEFINITIONS AND INCORPORATION BY REFERENCE

Section 1.1. Definitions.

“*Affiliate*” of any specified person means any other person directly or indirectly controlling or controlled by or under common control with such specified person. For the purposes of this definition, “control” (including, with correlative meanings, the terms “controlled by” and “under common control with”), as used with respect to any person, shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such person, whether through the ownership of voting securities or by agreement or otherwise.

“*Agent*” means any Registrar or Paying Agent.

“*Board of Directors*” means the board of directors of the Company or any duly authorized committee thereof.

“*Board Resolution*” means a copy of a resolution certified by the Secretary or an Assistant Secretary of the Company to have been adopted by the Board of Directors or pursuant to authorization by the Board of Directors and to be in full force and effect on the date of the certification and delivered to the Trustee.

“*Business Day*” means, for a particular Series, any day except a Saturday, Sunday or any day, including a legal holiday, on which banking institutions are authorized or required by law, regulation or executive order to close in The City of New York (or in connection with any payment, the place of payment).

“*Capital Stock*” of any person means any and all shares, interests, participations, rights or other equivalents (however designated) of the equity of such person.

“*Certificated Securities*” means definitive Securities in registered non-global certificated form.

“*Company*” means the party named as such above until a successor, which duly assumes the obligations under this Indenture, replaces it and thereafter means the successor.

“*Company Order*” means a written order signed in the name of the Company by an Officer.

“*Corporate Trust Office*” means the office of the Trustee at which at any particular time its corporate trust business related to this Indenture shall be principally administered, which office at the date hereof is located at _____, _____; Attention: _____, or such other address as the Trustee may designate from time to time by notice to the Holders and the Company, or the corporate trust office of any successor Trustee at which this Indenture shall be administered (or such other address as a successor Trustee may designate from time to time by notice to the Holders of the Company).

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

“*Depository*” means, with respect to the Securities of any Series issuable or issued in whole or in part in the form of one or more Global Securities, the person designated as Depository for such Series by the Company, which Depository shall be a clearing agency registered under the Exchange Act; and if at any time there is more than one such person, “Depository” as used with respect to the Securities of any Series shall mean the Depository with respect to the Securities of such Series.

“*Discount Security*” means any Security that provides for an amount less than the stated principal amount thereof to be due and payable upon declaration of acceleration of the maturity thereof pursuant to Section 6.2.

“*Dollars*” and “\$” means the currency of The United States of America.

“*Exchange Act*” means the Securities Exchange Act of 1934, as amended.

“*Foreign Currency*” means any currency or currency unit issued by a government other than the government of The United States of America.

“*Foreign Government Obligations*” means, with respect to Securities of any Series that are denominated in a Foreign Currency, direct obligations of, or obligations guaranteed by, the government that issued or caused to be issued such currency for the payment of which obligations its full faith and credit is pledged and which are not callable or redeemable at the option of the issuer thereof.

“*GAAP*” means accounting principles generally accepted in The United States of America set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as have been approved by a significant segment of the accounting profession, which are in effect as of the date of determination.

“*Global Security*” or “*Global Securities*” means a Security or Securities, as the case may be, in the form established pursuant to Section 2.2 evidencing all or part of a Series of Securities, issued to the Depository for such Series or its nominee, and registered in the name of such Depository or nominee.

“*Holder*” or “*Securityholder*” means a person in whose name a Security is registered on the books of the Registrar.

“*Indenture*” means this Indenture as amended or supplemented from time to time and shall include the form and terms of particular Series of Securities established as contemplated hereunder.

“*interest*” means, with respect to any Security, any interest on such Security, and with respect to any Discount Security which by its terms bears interest only after Maturity, interest payable after Maturity.

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

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

“*Officer’s Certificate*” means a certificate signed by any Officer (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 legal counsel. The counsel may be an employee of or counsel to the Company. Opinions of Counsel required to be delivered under this Indenture may have qualifications customary for opinions of the type required.

“*person*” means any individual, corporation, company, voluntary association, partnership, trust, joint venture, limited liability company, unincorporated organization or government or any agency, instrumentality or political subdivision thereof.

“*principal*” of a Security means the principal of the Security plus, when appropriate, the premium, if any, on the Security.

“*Responsible Officer*” means any officer of the Trustee in its Corporate Trust Office having direct responsibility for administration of this Indenture and also means, with respect to a particular corporate trust matter, any other officer to whom any corporate trust matter is referred because of his or her knowledge of and familiarity with a particular subject and who shall have direct responsibility for the administration of this Indenture.

“*SEC*” means the Securities and Exchange Commission.

“*Securities*” means the subordinated debentures, notes or other debt instruments of the Company of any Series authenticated and delivered under this Indenture.

“*Series*” or “*Series of Securities*” means each series of debentures, notes or other debt instruments of the Company created pursuant to Sections 2.1 and 2.2 hereof.

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

“*Subsidiary*” means, with respect to any person, any corporation, partnership, joint venture, limited liability company or other business entity of which a majority of the outstanding shares of Capital Stock or other interests having the power to vote in the election of directors, managers or trustees thereof is at the time directly or indirectly owned or controlled by such person or one or more of the other Subsidiaries of such person, or a combination thereof.

“*TIA*” means the Trust Indenture Act of 1939 (15 U.S. Code §§ 77aaa-77bbb) as in effect on the date of this Indenture; provided, however, that in the event the Trust Indenture Act of 1939 is amended after such date, “*TIA*” means, to the extent required by any such amendment, the Trust Indenture Act as so amended.

“*Trustee*” means the person named as the “Trustee” in the first paragraph of this instrument 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.

“*United States*” or “*U.S.*” means The United States of America (including the states thereof and the District of Columbia), its territories and possessions and other areas subject to its jurisdiction.

“*U.S. Government Obligations*” means securities which are direct obligations of, or guaranteed by, The United States of America for the payment of which its full faith and credit is pledged and which are not callable or redeemable at the option of the issuer thereof, and shall also include a depository receipt issued by a bank or trust company as custodian with respect to any such U.S. Government Obligation or a specific payment of interest on or principal of any such U.S. Government Obligation held by such custodian for the account of the holder of a depository receipt, 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 depository receipt from any amount received by the custodian in respect of the U.S. Government Obligation evidenced by such depository receipt.

Section 1.2. Other Definitions.

TERM	DEFINED IN SECTION
“ <i>Bankruptcy Law</i> ”	6.1
“ <i>Custodian</i> ”	6.1
“ <i>Event of Default</i> ”	6.1
“ <i>Judgment Currency</i> ”	10.16
“ <i>Legal Holiday</i> ”	10.7
“ <i>mandatory sinking fund payment</i> ”	11.1

<i>“optional sinking fund payment”</i>	11.1
<i>“Paying Agent”</i>	2.5
<i>“Registrar”</i>	2.5
<i>“Required Currency”</i>	10.16
<i>“successor person”</i>	5.1

Section 1.3. Incorporation by Reference of Trust Indenture Act.

Whenever this Indenture refers to a provision of the TIA, the provision is incorporated by reference in and made a part of this Indenture. The following TIA terms used in this Indenture have the following meanings:

“Commission” means the SEC.

“indenture securities” means the Securities.

“obligor” on the indenture securities means the Company and any successor obligor upon the Securities.

All other terms used in this Indenture that are defined by the TIA, defined by TIA reference to another statute or defined by SEC rule under the TIA and not otherwise defined herein are used herein as so defined.

Section 1.4. Rules of Construction.

Unless the context otherwise requires:

- (a) a term has the meaning assigned to it;
- (b) an accounting term not otherwise defined has the meaning assigned to it in accordance with GAAP;
- (c) “or” is not exclusive;
- (d) words in the singular include the plural, and in the plural include the singular; and
- (e) provisions apply to successive events and transactions.

ARTICLE II.
THE SECURITIES

Section 2.1. Issuable in Series.

The aggregate principal amount of Securities that may be authenticated and delivered under this Indenture is unlimited. The Securities may be issued in one or more Series. All Securities of a Series shall be identical except as may be set forth or determined in the manner provided in a Board Resolution, supplemental indenture hereto or Officer’s Certificate establishing the terms of such Series. In the case of Securities of a Series to be issued from time

to time, the Board Resolution, Officer's Certificate or supplemental indenture establishing the terms thereof may provide for the method by which specified terms (such as interest rate, maturity date, record date or date from which interest shall accrue) are to be determined. Securities may differ between Series in respect of any matters, provided that all Series of Securities shall be equally and ratably entitled to the benefits of this Indenture.

Section 2.2. Establishment of Terms of Series of Securities.

At or prior to the issuance of any Securities within a Series, the following shall be established (as to the Series generally, in the case of Subsection 2.2.1 and either as to such Securities within the Series or as to the Series generally in the case of Subsections 2.2.2 through 2.2.24) by or pursuant to a Board Resolution, and set forth or determined in the manner provided in a Board Resolution, supplemental indenture hereto or Officer's Certificate:

2.2.1. the title (which shall distinguish the Securities of that particular Series from the Securities of any other Series) of the Series;

2.2.2. the price or prices (expressed as a percentage of the principal amount thereof) at which the Securities of the Series will be issued;

2.2.3. any limit upon 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 2.8, 2.9, 2.12, 3.6 or 9.6);

2.2.4. the date or dates on which the principal of the Securities of the Series is payable;

2.2.5. the rate or rates (which may be fixed or variable) per annum or, if applicable, the method used to determine such rate or rates (including, but not limited to, any commodity, commodity index, stock exchange index or financial index) at which the Securities of the Series shall bear interest, if any, the date or dates from which such interest, if any, shall accrue, the date or dates on which such interest, if any, shall commence and be payable and any regular record date for the interest payable on any interest payment date;

2.2.6. the place or places where the principal of and interest, if any, on the Securities of the Series shall be payable, where the Securities of such Series may be surrendered for registration of transfer or exchange and where notices and demands to or upon the Company in respect of the Securities of such Series and this Indenture may be delivered, and the method of such payment, if by wire transfer, mail or other means;

2.2.7. if applicable, the period or periods within which, the price or prices at which and the terms and conditions upon which the Securities of the Series must be redeemed or may be redeemed, in whole or in part, at the option of the Company;

2.2.8. the obligation, if any, of the Company to redeem or purchase the Securities of the Series pursuant to any sinking fund or analogous provisions or at the option of a Holder thereof and the period or periods within which, the price or prices at which and the terms

and conditions upon which Securities of the Series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;

2.2.9. the dates, if any, on which and the price or prices at which the Securities of the Series will be repurchased by the Company at the option of the Holders thereof and other detailed terms and provisions of such repurchase obligations;

2.2.10. if other than denominations of \$1,000 and integral multiples of \$1,000 in excess thereof, the denominations in which the Securities of the Series shall be issuable;

2.2.11. the forms of the Securities of the Series and whether the Securities will be issuable as Global Securities;

2.2.12. if other than the principal amount thereof, the portion of the principal amount of the Securities of the Series that shall be payable upon declaration of acceleration of the maturity thereof pursuant to Section 6.2;

2.2.13. the currency of denomination of the Securities of the Series, which may be Dollars or any Foreign Currency, and if such currency of denomination is a composite currency, the agency or organization, if any, responsible for overseeing such composite currency;

2.2.14. the designation of the currency, currencies or currency units in which payment of the principal of and interest, if any, on the Securities of the Series will be made;

2.2.15. if payments of principal of or interest, if any, on the Securities of the Series are to be made in one or more currencies or currency units other than that or those in which such Securities are denominated, the manner in which the exchange rate with respect to such payments will be determined;

2.2.16. the manner in which the amounts of payment of principal of or interest, if any, on the Securities of the Series will be determined, if such amounts may be determined by reference to an index based on a currency or currencies or by reference to a commodity, commodity index, stock exchange index or financial index;

2.2.17. the provisions, if any, relating to any security provided for the Securities of the Series;

2.2.18. any addition to, deletion of 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 6.2;

2.2.19. any addition to, deletion of or change in the covenants set forth in Articles IV or V which applies to Securities of the Series;

2.2.20. any Depositaries, trustees, interest rate calculation agents, exchange rate calculation agents or other agents with respect to Securities of such Series if other than those appointed herein;

2.2.21. the provisions, if any, relating to conversion or exchange of any Securities of such Series, including if applicable, the conversion or exchange price, the conversion or exchange period, the securities or other property into which the Securities will be convertible, provisions as to whether conversion or exchange will be mandatory, at the option of the Holders thereof or at the option of the Company, the events requiring an adjustment of the conversion price or exchange price and provisions affecting conversion or exchange if such Series of Securities are redeemed;

2.2.22. whether any of the Company's direct or indirect Subsidiaries will guarantee the Securities of that Series, including the terms of subordination, if any, of such guarantees;

2.2.23. the subordination terms of the Securities of the Series; and

2.2.24. any other terms of the Series (which may supplement, modify or delete any provision of this Indenture insofar as it applies to such Series), including any terms that may be required under applicable law or regulations or advisable in connection with the marketing of Securities of that Series.

All Securities of any one Series need not be issued at the same time and may be issued from time to time, consistent with the terms of this Indenture, if so provided by or pursuant to the Board Resolution, supplemental indenture hereto or Officer's Certificate referred to above.

Section 2.3. Denominations; Provision for Payment.

The Securities of any Series shall be issuable, except as otherwise provided with respect to Securities of any Series pursuant to Section 2.2, as registered Securities in the denominations of one thousand Dollars (\$1,000) or any integral multiples of \$1,000 in excess thereof. Unless otherwise provided with respect to Securities of any Series pursuant to Section 2.2, the principal of and the interest on the Securities of any Series, if any, thereon, shall be payable in Dollars at the Corporate Trust Office of the Trustee. Unless otherwise specified pursuant to Section 2.2 with respect to any Securities of any Series, interest on the Securities of any Series shall be computed on the basis of a 360-day year consisting of twelve 30-day months.

Section 2.4. Execution and Authentication.

Two Officers shall sign the Securities for the Company by manual or facsimile signature.

If an Officer whose signature is on a Security no longer holds that office at the time the Security is authenticated, the Security shall nevertheless be valid.

A Security shall not be valid until authenticated by the manual signature of the Trustee or an authenticating agent. The signature shall be conclusive evidence that the Security has been authenticated under this Indenture.

The Trustee shall at any time, and from time to time, authenticate Securities for original issue in the principal amount provided in the Board Resolution, supplemental indenture hereto or Officer's Certificate, upon receipt by the Trustee of a Company Order. Each Security shall be dated the date of its authentication.

The aggregate principal amount of Securities of any Series outstanding at any time may not exceed any limit upon the maximum principal amount for such Series set forth in the Board Resolution, supplemental indenture hereto or Officer's Certificate delivered pursuant to Section 2.2, except as provided in Section 2.9.

Prior to the issuance of Securities of any Series, the Trustee shall have received and (subject to Section 7.1) shall be fully protected in conclusively relying on: (a) the Board Resolution, supplemental indenture hereto or Officer's Certificate delivered pursuant to Section 2.2 establishing the form of the Securities of that Series or of Securities within that Series and the terms of the Securities of that Series or of Securities within that Series, (b) an Officer's Certificate complying with Section 9.7 (with respect to the execution of supplemental indentures) and Section 10.4, and (c) an Opinion of Counsel complying with Section 9.7 (with respect to the execution of supplemental indentures) and Section 10.4.

The Trustee shall have the right, but not the obligation, to decline to authenticate and deliver any Securities of such Series: (a) if the Trustee, being advised by counsel, determines that such action may not be taken lawfully; or (b) if the Trustee in good faith determines that such action would expose the Trustee to personal liability.

The Trustee may appoint an authenticating agent acceptable to the Company to authenticate Securities. An authenticating agent may authenticate Securities whenever the Trustee may do so. Each reference in this Indenture to authentication by the Trustee includes authentication by such agent. An authenticating agent has the same rights as an Agent to deal with the Company or an Affiliate of the Company.

Section 2.5. Registrar and Paying Agent.

The Company shall maintain, with respect to each Series of Securities, at the place or places specified with respect to such Series, an office or agency where Securities of such Series may be presented or surrendered for payment ("*Paying Agent*") and where Securities of such Series may be surrendered for registration of transfer or exchange ("*Registrar*"). The Registrar shall keep a register with respect to each Series of Securities and to their transfer and exchange (the "*Security Register*"). The Company will give prompt written notice to the Trustee of the name and address, and any change in the name or address, of each Registrar or Paying Agent. If at any time the Company shall fail to maintain any such required Registrar or Paying Agent or shall fail to furnish the Trustee with the name and address thereof, such presentations and surrenders may be made or served at the Corporate Trust Office of the Trustee, and the Company hereby appoints the Trustee as its agent to receive all such presentations and surrenders.

The Company may also from time to time designate one or more co-registrars or additional paying agents 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 obligations to maintain a Registrar or Paying Agent in each place so specified 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 name or address of any such co-registrar or additional paying agent. The term “*Registrar*” includes any co-registrar; and the term “*Paying Agent*” includes any additional paying agent. The Company or any of its Affiliates may serve as Registrar or Paying Agent.

The Company hereby appoints the Trustee as the initial Registrar and Paying Agent for each Series unless another Registrar or Paying Agent, as the case may be, is appointed prior to the time Securities of that Series are first issued.

Section 2.6. Paying Agent to Hold Money in Trust.

The Company shall require each Paying Agent other than the Trustee to agree in writing that the Paying Agent will hold in trust, for the benefit of Securityholders of any Series of Securities, or the Trustee, all money held by the Paying Agent for the payment of principal of or interest on the Securities of that Series, and will notify the Trustee in writing of any default by the Company in making any such payment. While any such default continues, the Trustee may require a Paying Agent to pay all money held by it to the Trustee. The Company at any time may require a Paying Agent to pay all money held by it to the Trustee. Upon payment over to the Trustee, the Paying Agent (if other than the Company or a Subsidiary of the Company) shall have no further liability for the money. If the Company or a Subsidiary of the Company acts as Paying Agent, it shall segregate and hold in a separate trust fund for the benefit of Securityholders of any Series of Securities all money held by it as Paying Agent. Upon any bankruptcy, reorganization or similar proceeding with respect to the Company, the Trustee shall serve as Paying Agent for the Securities.

Section 2.7. Securityholder Lists.

The Trustee shall preserve in as current a form as is reasonably practicable the most recent list available to it of the names and addresses of Securityholders of each Series of Securities and shall otherwise comply with TIA § 312(a). If the Trustee is not the Registrar, the Company shall furnish to the Trustee at least ten days before each interest payment date and at such other times as the Trustee may request in writing, within 30 days after receipt by the Company of any such request, a list, in such form and as of such date as the Trustee may reasonably require, of the names and addresses of Securityholders of each Series of Securities.

Section 2.8. Transfer and Exchange.

Where Securities of a Series are presented to the Registrar or a co-registrar with a request to register a transfer or to exchange them for an equal principal amount of Securities of the same Series, the Registrar shall register the transfer or make the exchange if its requirements for such transactions are met. To permit registrations of transfers and exchanges, the Trustee shall authenticate Securities at the Registrar’s request. No service charge shall be made for any registration of transfer or exchange (except as otherwise expressly permitted herein), but the Company may require payment of a sum sufficient to cover any transfer tax or similar

governmental charge payable in connection therewith (other than any such transfer tax or similar governmental charge payable upon exchanges pursuant to Sections 2.12, 3.6 or 9.6).

Neither the Company nor the Registrar shall be required (a) to issue, register the transfer of, or exchange Securities of any Series for the period beginning at the opening of business 15 days immediately preceding the mailing of a notice of redemption of Securities of that Series selected for redemption and ending at the close of business on the day of such mailing, or (b) to register the transfer of or exchange Securities of any Series selected, called or being called for redemption as a whole or the portion being redeemed of any such Securities selected, called or being called for redemption in part.

Section 2.9. 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.

If there shall be delivered to the Company and the Trustee (a) evidence to their satisfaction of the destruction, loss or theft of any Security and (b) such security or indemnity bond as may be required by each of them to hold itself and any of its agents harmless, then, in the absence of written notice to the Company or the Trustee that such Security has been acquired by a bona fide purchaser, the Company shall execute and upon receipt of a Company Order the Trustee shall authenticate and make available for delivery, 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 2.9, 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 the Trustee) connected therewith.

Every new Security of any Series issued pursuant to this Section 2.9 in lieu of any destroyed, lost or stolen Security shall constitute an original additional contractual obligation of the Company, whether or not the 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 that Series duly issued hereunder.

The provisions of this Section 2.9 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.

Section 2.10. Outstanding Securities.

The Securities outstanding at any time are all the Securities authenticated by the Trustee except for those canceled by the Registrar and those described in this Section 2.10 as not outstanding.

If a Security is replaced pursuant to Section 2.9, it ceases to be outstanding unless the Trustee receives proof satisfactory to it that the replaced Security is held by a bona fide purchaser.

If the Paying Agent (other than the Company, a Subsidiary of the Company or an Affiliate of the Company) holds on the Maturity of Securities of a Series money sufficient to pay such Securities payable on that date, then on and after that date such Securities of the Series cease to be outstanding and interest on them ceases to accrue.

The Company may purchase or otherwise acquire the Securities, whether by open market purchases, negotiated transactions or otherwise. A Security does not cease to be outstanding because the Company or an Affiliate of the Company holds the Security.

In determining whether the Holders of the requisite principal amount of outstanding Securities have given any request, demand, authorization, direction, notice, consent or waiver hereunder, the principal amount of a Discount Security that shall be deemed to be outstanding for such purposes shall be the amount of the principal thereof that would be due and payable as of the date of such determination upon a declaration of acceleration of the Maturity thereof pursuant to Section 6.2.

Section 2.11. Treasury Securities.

In determining whether the Holders of the required principal amount of Securities of a Series have concurred in any request, demand, authorization, direction, notice, consent or waiver, Securities of a Series owned by the Company or any Affiliate of the Company shall be disregarded, except that for the purposes of determining whether the Trustee shall be protected in conclusively relying on any such request, demand, authorization, direction, notice, consent or waiver, only Securities of a Series that a Responsible Officer of the Trustee actually knows are so owned shall be so disregarded. Securities so owned which have been pledged in good faith shall not be disregarded if the pledgee establishes to the satisfaction of the Trustee the pledgee's right to deliver any such request, demand, authorization, direction, notice, consent or waiver with respect to the 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.

Section 2.12. Temporary Securities.

Until definitive Securities are ready for delivery, the Company may prepare and the Trustee shall authenticate temporary Securities upon a Company Order. Temporary Securities shall be substantially in the form of definitive Securities but may have variations that the Company considers appropriate for temporary Securities. Without unreasonable delay, the Company shall prepare and the Trustee upon receipt of a Company Order shall authenticate definitive Securities of the same Series and date of maturity in exchange for temporary

Securities. Until so exchanged, temporary Securities shall have the same rights under this Indenture as the definitive Securities.

Section 2.13. Cancellation.

The Company at any time may deliver Securities to the Trustee for cancellation. The Registrar and the Paying Agent, if not the Trustee, shall forward to the Trustee any Securities surrendered to them for registration of transfer, exchange or payment. The Trustee shall cancel all Securities surrendered for transfer, exchange, payment, replacement, conversion or cancellation and shall dispose of such canceled Securities (subject to the record retention requirement of the Exchange Act and the Trustee) in accordance with its customary procedures and deliver a certificate of such cancellation to the Company upon written request of the Company. The Company may not issue new Securities to replace Securities that it has paid or delivered to the Trustee for cancellation.

Section 2.14. Defaulted Interest.

If the Company defaults in a payment of interest on a Series of Securities, it may pay the defaulted interest, plus, to the extent permitted by law, any interest payable on the defaulted interest, to the persons who are Securityholders of the Series on a subsequent special record date. The Company shall fix the record date and payment date. At least ten days before the special record date, the Company shall mail to the Trustee and to each Securityholder of the Series a notice that states the special record date, the payment date and the amount of interest to be paid. The Company may pay defaulted interest in any other lawful manner.

Section 2.15. Global Securities.

2.15.1. Terms of Securities. A Board Resolution, a supplemental indenture hereto or an Officer's Certificate shall establish whether the Securities of a Series shall be issued in whole or in part in the form of one or more Global Securities and the Depositary for such Global Security or Securities.

2.15.2. Transfer and Exchange. Notwithstanding any provisions to the contrary contained in Section 2.8 of this Indenture and in addition thereto, any Global Security shall be exchangeable pursuant to Section 2.8 of this Indenture for Securities registered in the names of Holders other than the Depositary for such Security or its nominee only if (a) such Depositary notifies the Company that it is unwilling or unable to continue as Depositary for such Global Security or if at any time such Depositary ceases to be a clearing agency registered under the Exchange Act, and, in either case, the Company fails to appoint a successor Depositary registered as a clearing agency under the Exchange Act within 90 days of such event or (b) the Company determines in its sole discretion not to have such Securities represented by one or more Global Securities and executes and delivers to the Trustee an Officer's Certificate to the effect that such Global Security shall be so exchangeable. Any Global Security that is exchangeable pursuant to the preceding sentence shall be exchangeable for Securities registered in such names as the Depositary shall direct in writing in an aggregate principal amount equal to the principal amount of the Global Security with like tenor and terms.

Except as provided in this Section 2.15.2, a Global Security may not be transferred except as a whole by the Depositary with respect to such Global Security to a nominee of such Depositary, by a nominee of such Depositary to such Depositary or another nominee of such Depositary or by the Depositary or any such nominee to a successor Depositary or a nominee of such a successor Depositary.

2.15.3. Legend. Any Global Security issued hereunder shall bear a legend in substantially the following form:

“THIS SECURITY IS A GLOBAL SECURITY WITHIN THE MEANING OF THE INDENTURE HEREINAFTER REFERRED TO AND IS REGISTERED IN THE NAME OF THE DEPOSITARY OR A NOMINEE OF THE DEPOSITARY. THIS SECURITY IS EXCHANGEABLE FOR SECURITIES REGISTERED IN THE NAME OF A PERSON OTHER THAN THE DEPOSITARY OR ITS NOMINEE ONLY IN THE LIMITED CIRCUMSTANCES DESCRIBED IN THE INDENTURE, AND MAY NOT BE TRANSFERRED EXCEPT AS A WHOLE BY THE DEPOSITARY TO A NOMINEE OF THE DEPOSITARY, BY A NOMINEE OF THE DEPOSITARY TO THE DEPOSITARY OR ANOTHER NOMINEE OF THE DEPOSITARY, OR BY THE DEPOSITARY OR ANY SUCH NOMINEE TO A SUCCESSOR DEPOSITARY OR A NOMINEE OF SUCH A SUCCESSOR DEPOSITARY.”

2.15.4. Acts of Holders. The Depositary, as a Holder, may appoint agents and otherwise authorize participants to give or take any request, demand, authorization, direction, notice, consent, waiver or other action which a Holder is entitled to give or take under this Indenture.

2.15.5. Payments. Notwithstanding the other provisions of this Indenture, unless otherwise specified as contemplated by Section 2.2, payment of the principal of and interest, if any, on any Global Security shall be made to the Holder thereof, which in the case of a Depositary therefor will be made in accordance with its applicable procedures.

2.15.6. Consents, Declaration and Directions. The Company, the Trustee and any Agent shall treat a person as the Holder of such principal amount of outstanding Securities of such Series represented by a Global Security as shall be specified in a written statement of the Depositary or by the applicable procedures of such Depositary with respect to such Global Security, for purposes of obtaining any consents, declarations, waivers or directions required to be given by the Holders pursuant to this Indenture.

Section 2.16. CUSIP Numbers.

The Company in issuing the Securities may use “CUSIP” numbers (if then generally in use), and, if so, the Trustee shall use “CUSIP” numbers in notices of redemption as a convenience to Holders; 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 or as contained in any notice of a redemption and that reliance may be placed only on the other elements of identification printed on the Securities, and any such redemption shall not be affected by any defect in or omission of such numbers. The Trustee shall have no liability for any defect in the

“CUSIP” numbers as they appear on any Security, notice or elsewhere. The Company will promptly notify the Trustee in writing of any change in the “CUSIP” numbers.

Section 2.17. Evidence of Ownership.

The Company, the Trustee and any agent of the Company or the Trustee may deem and treat the person in whose name any registered Security shall be registered upon the Security Register for such series as the absolute owner of such registered Security (whether or not such registered Security shall be overdue and notwithstanding any notation of ownership or other writing thereon) for the purpose of receiving payment of or on account of the principal of and, subject to the provisions of this Indenture, interest on such registered Security and for all other purposes; and neither the Company nor the Trustee nor any agent of the Company or the Trustee shall be affected by any notice to the contrary.

ARTICLE III.
REDEMPTION

Section 3.1. Notice to Trustee.

The Company may, with respect to any Series of Securities, reserve the right to redeem and pay the Series of Securities or may covenant to redeem and pay the Series of Securities or any part thereof prior to the Stated Maturity thereof at such time and on such terms as provided for in such Securities. If a Series of Securities is redeemable and the Company wants or is obligated to redeem prior to the Stated Maturity thereof all or part of the Series of Securities pursuant to the terms of such Securities, it shall notify the Trustee in writing of the redemption date and the principal amount of Series of Securities to be redeemed. The Company shall give the notice to the Trustee at least 45 days before the redemption date, unless a shorter period is satisfactory to the Trustee.

Section 3.2. Selection of Securities to be Redeemed.

Unless otherwise indicated for a particular Series by a Board Resolution, a supplemental indenture hereto or an Officer’s Certificate, if less than all the Securities of a Series are to be redeemed, the Trustee shall select the Securities of the Series to be redeemed in any manner that the Trustee deems fair and appropriate, including selecting by lot or other method, unless otherwise required by law or applicable stock exchange requirements, subject, in the case of Global Securities, to the applicable rules and procedures of the Depositary; *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. The Trustee shall make the selection from Securities of the Series outstanding not previously called for redemption. Provisions of this Indenture that apply to Securities of a Series called for redemption also apply to portions of Securities of that Series called for redemption.

Section 3.3. Notice of Redemption.

Unless otherwise indicated for a particular Series by Board Resolution, a supplemental indenture hereto or an Officer’s Certificate, at least 30 days but not more than 60

days before a redemption date, the Company shall mail a notice of redemption by first-class mail to each Holder whose Securities are to be redeemed.

The notice shall identify the Securities of the Series to be redeemed and shall state:

- (a) the redemption date;
- (b) the redemption price and the amount of accrued interest, if any, to be paid;
- (c) the name and address of the Paying Agent and, if applicable, the conversion Agent;
- (d) for convertible Securities, the conversion price;

(e) if any Global Security is being redeemed in part, the portion of the principal amount of such Global Security to be redeemed and that, after the redemption date upon surrender of such Global Security, the principal amount thereof will be decreased by the portion thereof redeemed pursuant thereto;

(f) if any Certificated Security is being redeemed in part, the portion of the principal amount of such Security to be redeemed, and that, after the redemption date, upon surrender of such Security, a new Certificated Security in principal amount equal to the unredeemed portion thereof will be issued in the name of the Holder thereof upon cancellation of the original Certificated Security;

(g) that Securities of the Series (or portion thereof) called for redemption must be surrendered to the Paying Agent to collect the redemption price;

(h) that interest on Securities of the Series called for redemption ceases to accrue on and after the redemption date unless the Company defaults in the deposit of the redemption price;

(i) the CUSIP number, if any, and state that no representation is made as to the correctness or accuracy of the CUSIP number, if any, listed in the SEC's notice or printed on the Securities; and

(j) any other information as may be required by the terms of the particular Series or the Securities of a Series being redeemed.

At the Company's request, the Trustee shall give the notice of redemption in the Company's name and at its expense, provided, however, that the Company has delivered to the Trustee, at least 15 days (unless a shorter time shall be acceptable to the Trustee) prior to the notice date, an Officer's Certificate requesting that the Trustee give such notice and setting forth the information to be stated in such notice.

Section 3.4. Effect of Notice of Redemption.

Once notice of redemption is mailed as provided in Section 3.3, Securities of a Series called for redemption become due and payable on the redemption date and at the redemption price. Except as otherwise provided in the supplemental indenture, Board Resolution or Officer's Certificate for a Series, a notice of redemption may not be conditional. Upon surrender to the Paying Agent, such Securities shall be paid at the redemption price plus accrued interest to the redemption date other than Securities or portions of Securities called for redemption which have been delivered by the Company to the Registrar for cancellation. The Paying Agent shall return to the Company any money not required for that purpose.

Unless the Company shall default in the payment of Securities (and accrued interest) called for redemption, interest on such Securities shall cease to accrue after the redemption date. Convertible Securities called for redemption shall cease to be convertible after the close of business on the Business Day immediately preceding the redemption date, unless the Company shall default in the payment of such Securities on the redemption date, in which event the Securities shall remain convertible until paid (together with accrued interest).

Failure to give notice of redemption, or any defect in such notice to the Holder of any Security of a Series designated for redemption, in whole or in part, shall not affect the sufficiency of any notice of redemption with respect to the Holder of any other Security of such Series.

Section 3.5. Deposit of Redemption Price.

On or before 10:00 a.m., New York City time, on the redemption date, the Company shall deposit with the Paying Agent money sufficient to pay the redemption price of and accrued interest, if any, on all Securities to be redeemed on that date.

Section 3.6. Securities Redeemed in Part.

Upon surrender of a Certificated Security that is redeemed in part, the Trustee shall authenticate for the Holder a new Certificated Security of the same Series and the same maturity equal in principal amount to the unredeemed portion of the Security surrendered and concurrently cancel the surrendered Certificated Security.

ARTICLE IV.
COVENANTS

Section 4.1. Payment of Principal and Interest.

The Company covenants and agrees for the benefit of the Holders of each Series of Securities that it will duly and punctually pay the principal of and interest, if any, on the Securities of that Series in accordance with the terms of such Securities and this Indenture. On or before 10:00 a.m., New York City time, on the applicable payment date, the Company shall deposit with the Paying Agent money sufficient to pay the principal of and interest, if any, on the Securities of each Series in accordance with the terms of such Securities and this Indenture. Principal and interest shall be considered paid on the date due if the Paying Agent holds in

accordance with this Indenture on that date money sufficient to pay all principal and interest then due and the Paying Agent is not prohibited from paying such money to the Holders on such date pursuant to the terms of this Indenture.

Section 4.2. Reports by Company.

(a) As long as any Securities are outstanding, the Company shall file with the Trustee, and transmit to the Holders, such information, documents and other reports, and such summaries thereof, as may be required pursuant to TIA § 314(a). All reports, information and documents referred to in this Section 4.2 will be deemed to be filed with the Trustee and transmitted to the Holders at the time such reports, information or documents are publicly filed with the SEC via the SEC's EDGAR filing system (or any successor system), it being understood that the Trustee shall have no responsibility whatsoever to determine if such filings have been made.

(b) Delivery of reports, information and documents to the Trustee under this Section 4.2 are for informational purposes only and shall not constitute a representation or warranty as to the accuracy or completeness of the reports, information and documents. The Trustee's receipt of the foregoing 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).

Section 4.3. Compliance Certificate.

To the extent any Securities of a Series are outstanding, the Company shall deliver to the Trustee, within 120 days after the end of each fiscal year of the Company, an Officer's Certificate (which need not contain the statements provided for in Section 10.4) from its principal executive officer, principal financial officer or principal accounting officer stating that a review of the activities of the Company and its Subsidiaries during the preceding fiscal year has been made under the supervision of the signing Officer with a view to determining whether the Company has kept, observed, performed and fulfilled its obligations under this Indenture, and further stating, as to such Officer signing such certificate, that to his or her knowledge the Company is not in default in the performance or observance of any of the terms, provisions and conditions hereof (or, if a Default or Event of Default shall have occurred, describing all such Defaults or Events of Default of which the Officer has knowledge). Such Officer's Certificate need not include a reference to any non-compliance that has been fully cured prior to the date as of which such certificate speaks.

Section 4.4. Stay, Extension and Usury Laws.

The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay, extension or usury law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of this Indenture or the Securities; and the Company (to the extent it may lawfully do so) hereby expressly waives all benefit or advantage of any such law and covenants that it will not, by resort to any such law, 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 has been enacted.

Section 4.5. Corporate Existence.

Subject to Article V, the Company will do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence and rights (charter and statutory); provided, however, that the Company shall not be required to preserve any such right if the Board of Directors shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Company and its Subsidiaries taken as a whole and that the loss thereof is not adverse in any material respect to the Holders.

ARTICLE V.
SUCCESSORS

Section 5.1. Consolidation, Merger and Sale of Assets.

The Company may not consolidate with or merge with or into, sell, convey, transfer or dispose of all or substantially all of its assets to any other person (a “*successor person*”), whether in one transaction or a series of related transactions, unless:

(a) (i) the Company is the surviving corporation or (ii) the successor person (if other than the Company) (A) is a corporation, limited liability corporation, partnership or trust organized under the laws of the United States; and (B) expressly assumes, by an indenture supplemental hereto, the Company’s obligations on the Securities and under this Indenture; and

(b) immediately after giving effect to the transaction, no Default or Event of Default shall have happened and be continuing.

The Company shall deliver to the Trustee prior to the consummation of the proposed transaction an Officer’s Certificate to the foregoing effect and an Opinion of Counsel stating that the proposed transaction and any supplemental indenture comply with Section 5.1 of this Indenture.

Notwithstanding the above, any Subsidiary of the Company may consolidate with, merge into or transfer all or part of its properties to the Company. Neither an Officer’s Certificate nor an Opinion of Counsel shall be required to be delivered in connection therewith.

Section 5.2. Successor Person Substituted.

Upon any consolidation or merger, or any sale, conveyance, transfer, or lease of all or substantially all of the assets of the Company and its Subsidiaries in accordance with Section 5.1, the successor person formed by such consolidation or into or with which the Company is merged or to which such sale, conveyance, transfer, or lease is made shall succeed to, and be substituted for, and may exercise every right and power of, the Company under this Indenture and the Securities with the same effect as if such successor person has been named as the Company herein; and, thereafter, the predecessor Company, in the case of a sale, conveyance

or transfer (other than a lease), shall be released from all obligations and covenants under this Indenture and the Securities.

ARTICLE VI.
DEFAULTS AND REMEDIES

Section 6.1. Events of Default.

“*Event of Default*,” wherever used herein with respect to Securities of any Series, means any one of the following events, unless in the establishing Board Resolution, supplemental indenture or Officer’s Certificate, it is provided that such Series shall not have the benefit of said Event of Default:

- (a) failure to pay any interest on any Security of that Series when it becomes due and payable, and continuance of such default for a period of 30 days (unless the entire amount of such payment is deposited by the Company with the Trustee or with a Paying Agent prior to 10:00 a.m., New York City time, on the 30th day of such period);
- (b) failure to pay principal of any Security of that Series at its Maturity;
- (c) default in the performance or breach of any covenant of the Company in this Indenture (other than defaults pursuant to sub-clauses (a) through (c) above or defaults related to a covenant that has been included in this Indenture solely for the benefit of a Series of Securities other than that Series), which default continues uncured for a period of 90 days after there has been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 25% in principal amount of the outstanding Securities of that Series a written notice specifying such default or breach and requiring it to be remedied and stating that such notice is a “Notice of Default” hereunder;
- (d) the Company pursuant to or within the meaning of any Bankruptcy Law:
 - (i) commences a voluntary case,
 - (ii) consents to the entry of an order for relief against it in an involuntary case,
 - (iii) consents to the appointment of a Custodian of it or for all or substantially all of its property, or
 - (iv) makes a general assignment for the benefit of its creditors;
- (e) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:
 - (i) is for relief against the Company in an involuntary case,

(ii) appoints a Custodian of the Company or for all or substantially all of its property, or

(iii) orders the liquidation of the Company,

and the order or decree remains unstayed and in effect for 60 days; or

(f) any other Event of Default provided with respect to Securities of that Series, which is specified in a Board Resolution, a supplemental indenture hereto or an Officer's Certificate, in accordance with Section 2.2.18.

The term "*Bankruptcy Law*" means title 11, U.S. Code or any similar federal or state law for the relief of debtors. The term "*Custodian*" means any receiver, trustee, assignee, liquidator or similar official under any Bankruptcy Law.

A Default under one Series of Securities issued under this Indenture will not necessarily be a default under another Series of Securities under this Indenture.

The Company will, so long as any of the Securities are outstanding, deliver to the Trustee, within 30 days of becoming aware of any Default or Event of Default, an Officer's Certificate specifying such Default or Event of Default and what action the Company is taking or proposes to take with respect thereto.

Section 6.2. Acceleration of Maturity; Rescission and Annulment.

If an Event of Default with respect to Securities of any Series at the time outstanding occurs and is continuing (other than an Event of Default referred to in Section 6.1(d) or (e)) then in every such case the Trustee or the Holders of not less than 25% in principal amount of the outstanding Securities of that Series may declare the principal amount (or, if any Securities of that Series are Discount Securities, such portion of the principal amount as may be specified in the terms of such Securities) of and accrued and unpaid interest, if any, on all of the Securities of that Series 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) and accrued and unpaid interest, if any, shall become immediately due and payable. If an Event of Default specified in Section 6.1(d) or (e) shall occur, the principal amount (or specified amount) of and accrued and unpaid interest, if any, on all outstanding Securities shall *ipso facto* become and be immediately due and payable without any declaration or other act on the part of the Trustee or any Holder.

At any time after such a declaration of acceleration with respect to 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 provided, the Holders of a majority in principal amount of the outstanding Securities of that Series, by written notice to the Company and the Trustee, may rescind and annul such declaration and its consequences if all Events of Default with respect to Securities of that Series, other than the non-payment of the principal and interest, if any, of Securities of that Series which have become due solely by such declaration of acceleration, have been cured or waived as provided in Section 6.13.

No such rescission shall affect any subsequent Default.

Section 6.3. Collection of Indebtedness and Suits for Enforcement by Trustee.

The Company covenants that if

- (a) 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
- (b) default is made in the payment of principal of any Security at the Maturity thereof, or
- (c) default is made in the deposit of any sinking fund payment, if any, when and as due by the terms of a Security,

then, 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 interest and, to the extent that payment of such interest shall be legally enforceable, interest on any overdue principal and 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 the Company fails to pay such amounts forthwith upon such demand, the Trustee, in its own name and as trustee of an express trust, may institute a judicial proceeding for the collection of the sums so due and unpaid, may prosecute such proceeding to judgment or final decree and may enforce the same against the Company or any other obligor upon such Securities and collect the moneys adjudged or deemed to be payable in the manner provided by law out of the property of the Company or any other obligor upon such Securities, wherever situated.

If an Event of Default with respect to any 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 most effectual 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.

Section 6.4. Trustee May File Proofs of Claim.

In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding relating to the Company or any other obligor upon the Securities or the property of the Company or of such other obligor or their creditors, the Trustee (irrespective of whether the principal of the Securities shall then be due and payable as therein expressed or by declaration or otherwise and irrespective of whether the Trustee shall have made any demand on the Company for the payment of overdue principal or interest) shall be entitled and empowered, by intervention in such proceeding or otherwise,

(a) to file and prove a claim for the whole amount of principal and interest owing and unpaid in respect of the Securities and to file such other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and of the Holders allowed in such judicial proceeding, and

(b) 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 for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 7.7.

Nothing herein contained 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.

Section 6.5. 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, its agents and counsel, be for the ratable benefit of the Holders of the Securities in respect of which such judgment has been recovered.

Section 6.6. Application of Money Collected.

Any money or property collected by the Trustee pursuant to this Article 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 or property on account of principal 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 to the Trustee under this Indenture; and

Second: To the payment of all indebtedness of the Company to which such Series of Securities is subordinated to the extent required by Article 12 of this Indenture; and

Third: To the payment of the amounts then due and unpaid for principal of 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, according to the amounts due and payable on such Securities for principal and interest, respectively; and

Fourth: To the Company.

Section 6.7. 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 or trustee, or for any other remedy hereunder, unless:

- (a) such Holder has previously given written notice to the Trustee of a continuing Event of Default with respect to the Securities of that Series;
- (b) the Holders of not less than 25% in principal amount of the outstanding Securities of that Series have made written request to the Trustee to institute proceedings in respect of such Event of Default in its own name as Trustee hereunder;
- (c) such Holder or Holders have offered to the Trustee indemnity or security satisfactory to the Trustee against the costs, expenses and liabilities which might be incurred by the Trustee in compliance with such request;
- (d) the Trustee has failed to institute any such proceeding for 60 days after its receipt of such notice, request and offer of indemnity; and
- (e) 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 principal amount of the outstanding Securities of that Series;

it being understood, intended and expressly covenanted by the Holder of every Security with every other Holder and the Trustee 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 or to enforce any right under this Indenture, except in the manner herein provided and for the equal and ratable benefit of all such Holders of the applicable Series; provided, however, that the Trustee does not have an affirmative duty to ascertain whether or not such actions or forbearances are unduly prejudicial to such Holders.

Section 6.8. Unconditional Right of Holders to Receive Principal and Interest.

Notwithstanding any other provision in this Indenture, the Holder of any Security has the right, which is absolute and unconditional, to receive payment of the principal of and interest, if any, on such Security on the Maturity of such Security, including the Stated Maturity expressed in such Security (or, in the case of redemption, on the redemption date) and to institute suit for the enforcement of any such payment, and such rights shall not be impaired without the consent of such Holder.

Section 6.9. 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.

Section 6.10. Rights and Remedies Cumulative.

Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities in Section 2.9, 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, to the extent permitted by law, prevent the concurrent assertion or employment of any other appropriate right or remedy.

Section 6.11. 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 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.

Section 6.12. Control by Holders.

The Holders of a majority in 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:

- (a) such direction shall not be in conflict with any rule of law or with this Indenture;
- (b) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction;
- (c) subject to the provisions of Section 7.1, the Trustee shall have the right to decline to follow any such direction if the Trustee in good faith shall, by a Responsible Officer of the Trustee, determine that the proceeding so directed would involve the Trustee in personal liability; and

(d) prior to taking any action as directed under this Section 6.12, the Trustee shall be entitled to indemnity satisfactory to it against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction.

Section 6.13. Waiver of Past Defaults.

The Holders of not less than a majority in 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 in the payment of the principal of or interest on any Security of such Series (provided, however, that the Holders of a majority in principal amount of the outstanding Securities of any Series may rescind an acceleration and its consequences, including any related payment default that resulted from such acceleration). 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.

Section 6.14. Undertaking for Costs.

All parties to this Indenture agree, and each Holder of any Security by his acceptance thereof shall be deemed to have agreed, that any court may in its discretion require, 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, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable attorneys' fees and expenses, against any party litigant in such suit, having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the provisions of this Section 6.14 shall not apply to any suit instituted by the Company, to any suit instituted by the Trustee, to any suit instituted by any Holder, or group of Holders, holding in the aggregate more than 10% in principal amount of the outstanding Securities of any Series, or to any suit instituted by any Holder for the enforcement of the payment of the principal of or interest on any Security on or after the Maturity of such Security, including the Stated Maturity expressed in such Security (or, in the case of redemption, on the redemption date).

ARTICLE VII.
TRUSTEE

Section 7.1. Duties of Trustee.

(a) If an Event of Default has occurred and is continuing, the Trustee shall exercise the rights and powers vested in it by this 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.

(b) Except during the continuance of an Event of Default:

(i) The Trustee need perform only those duties that are specifically set forth in this Indenture and no others.

(ii) In the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon Officer's Certificates or Opinions of Counsel furnished to the Trustee and conforming to the requirements of this Indenture; however, in the case of any such Officer's Certificates or Opinions of Counsel which by any provisions hereof are specifically required to be furnished to the Trustee, the Trustee shall examine such Officer's Certificates and Opinions of Counsel 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).

(c) The Trustee may not be relieved from liability for its own negligent action, its own negligent failure to act or its own willful misconduct, except that:

(i) This sub-clause (c) does not limit the effect of sub-clause (b) of this Section 7.1.

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

(iii) The Trustee shall not be liable with respect to any action taken, suffered or omitted to be taken by it with respect to Securities of any Series in good faith in accordance with the direction of the Holders of a majority in principal amount of the outstanding Securities of such Series 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 in accordance with Section 6.12.

(d) Every provision of this Indenture that in any way relates to the Trustee is subject to sub-clauses (a), (b) and (c) of this Section 7.1.

(e) The Trustee may refuse to perform any duty or exercise any right or power unless it receives indemnity satisfactory to it against the costs, expenses and liabilities which might be incurred by it in performing such duty or exercising such right or power.

(f) The Trustee shall not be liable for interest on any money received by it, except as the Trustee may agree in writing with the Company. Money held in trust by the Trustee need not be segregated from other funds except to the extent required by law.

(g) No provision of this Indenture shall require the Trustee to risk its own funds or otherwise incur any financial liability in the performance of any of its duties, or in the exercise of any of its rights or powers, if adequate indemnity against such risk is not assured to the Trustee in its satisfaction.

(h) The Paying Agent, the Registrar and any authenticating agent shall be entitled to the protections and immunities as are set forth in sub-clauses (e), (f) and (g) of this Section 7.1 and in Section 7.2, each with respect to the Trustee.

Section 7.2. Rights of Trustee.

(a) The Trustee may conclusively rely on and shall be protected in acting or refraining from acting upon any document (whether in its original or facsimile form) believed by it to be genuine and to have been signed or presented by the proper person. The Trustee need not investigate any fact or matter stated in the document.

(b) Before the Trustee acts or refrains from acting, it shall be entitled to receive an Officer's Certificate or an Opinion of Counsel or both. The Trustee shall not be liable for any action it takes or omits to take in good faith in conclusive reliance on such Officer's Certificate or Opinion of Counsel.

(c) The Trustee may act through agents and shall not be responsible for the misconduct or negligence of any agent appointed with due care. No Depositary shall be deemed an agent of the Trustee and the Trustee shall not be responsible for any act or omission by any Depositary.

(d) The Trustee shall not be liable for any action it takes or omits to take in good faith which it believes to be authorized or within its rights or powers, provided that the Trustee's conduct does not constitute willful misconduct or negligence.

(e) 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.

(f) 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 of Securities 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.

(g) 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 shall incur no liability or additional liability of any kind by reason of such inquiry or investigation.

(h) The Trustee shall not be deemed to have notice of any Default or Event of Default unless a Responsible Officer of the Trustee has actual knowledge thereof or unless written notice of any event which is in fact such a default is received by a Responsible Officer of the Trustee at the Corporate Trust Office of the Trustee, and such

notice references the Securities generally or the Securities of a particular Series and this Indenture.

(i) In no event shall the Trustee be liable to any person for special, punitive, indirect, consequential or incidental loss or damage of any kind whatsoever (including but not limited to lost profits), even if the Trustee has been advised of the likelihood of such loss or damage.

(j) The permissive right of the Trustee to take the actions permitted by this Indenture shall not be construed as an obligation or duty to do so.

(k) 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 each agent, custodian and other Person employed to act hereunder.

(l) The Trustee shall not be required to give any bond or surety in respect of the performance of its powers and duties hereunder.

(m) 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.

Section 7.3. Individual Rights of Trustee.

The Trustee in its individual or any other capacity may become the owner or pledgee of Securities and may otherwise deal with the Company or an Affiliate of the Company with the same rights it would have if it were not Trustee. Any Agent may do the same with like rights. However, the Trustee is also subject to Sections 7.10 and 7.11 hereof.

Section 7.4. Trustee's Disclaimer.

The Trustee makes no representation as to the validity or adequacy of this Indenture or the Securities, it shall not be accountable for the Company's use of the proceeds from the Securities, and it shall not be responsible for any statement in the Securities other than its authentication.

Section 7.5. Notice of Defaults.

If a Default or Event of Default occurs and is continuing with respect to the Securities of any Series and if it is actually known to a Responsible Officer of the Trustee, the Trustee shall mail to each Securityholder of the Securities of that Series notice of a Default or Event of Default within 90 days after it occurs or, if later, after a Responsible Officer of the Trustee has knowledge of such Default or Event of Default. Except in the case of a Default or Event of Default in payment of principal of or interest on any Security of any Series, the Trustee may withhold the notice if and so long as it in good faith determines that withholding the notice is in the interests of Securityholders of that Series.

Section 7.6. Reports by Trustee to Holders.

Within 60 days after each anniversary of the date of this Indenture, the Trustee shall transmit by mail to all Securityholders, as their names and addresses appear on the register kept by the Registrar, a brief report dated as of such reporting date, in accordance with, and to the extent required under, TIA § 313.

A copy of each report at the time of its mailing to Securityholders of any Series shall be filed with the SEC and each national securities exchange on which the Securities of that Series are listed. The Company shall promptly notify the Trustee in writing when Securities of any Series are listed on any national securities exchange or of any delisting thereof.

Section 7.7. Compensation and Indemnity.

The Company shall pay to the Trustee from time to time compensation for its services as the Company and the Trustee shall from time to time agree upon in writing. The Trustee's compensation shall not be limited by any law on compensation of a trustee of an express trust. The Company shall reimburse the Trustee upon request for all reasonable out of pocket expenses incurred by it. Such expenses shall include the reasonable compensation and expenses of the Trustee's agents and counsel.

The Company shall indemnify each of the Trustee and any predecessor Trustee against any cost, expense, claim (whether asserted by the Company, a Holder or any other person) or liability (including the cost of defending itself), including taxes (other than taxes based upon, measured by or determined by the income of the Trustee), incurred by it except as set forth in the next paragraph in the performance of its duties under this Indenture as Trustee or Agent. The Trustee shall notify the Company promptly of any claim for which it may seek indemnity. Failure by the Trustee to so notify the Company shall not relieve the Company of its obligations hereunder, unless and to the extent that the Company is materially prejudiced thereby. The Company shall defend the claim and the Trustee shall cooperate in the defense. The Trustee may have one separate counsel and the Company shall pay the reasonable fees and expenses of such counsel. The Company need not pay for any settlement made without its consent, which consent will not be unreasonably withheld. This indemnification shall apply to officers, directors, employees, shareholders and agents of the Trustee.

The Company need not reimburse any expense or indemnify against any loss or liability incurred by the Trustee or by any officer, director, employee or shareholder of the Trustee through willful misconduct or negligence.

To secure the Company's payment obligations in this Section 7.7, the Trustee shall have a lien prior to the Securities of any Series on all money or property held or collected by the Trustee, except that held in trust to pay principal of and interest on particular Securities of that Series.

When the Trustee incurs expenses or renders services after an Event of Default specified in Section 6.1(f) or (g) occurs, the expenses and the compensation for the services are intended to constitute expenses of administration under any Bankruptcy Law.

The provisions of this Section 7.7 shall survive the termination of this Indenture or the resignation or removal of the Trustee.

Section 7.8. Replacement of Trustee.

A resignation or removal of the Trustee and appointment of a successor Trustee shall become effective only upon the successor Trustee's acceptance of appointment as provided in this Section 7.8.

The Trustee may resign at any time with respect to the Securities of one or more Series by so notifying the Company at least 30 days prior to the date of the proposed resignation. The Holders of a majority in principal amount of the Securities of any Series may remove the Trustee with respect to that Series by so notifying the Trustee and the Company in writing. The Company may remove the Trustee with respect to Securities of one or more Series if:

- Law;
- (a) the Trustee fails to comply with Section 7.10;
 - (b) the Trustee is adjudged a bankrupt or an insolvent or an order for relief is entered with respect to the Trustee under any Bankruptcy Law;
 - (c) a Custodian or public officer takes charge of the Trustee or its property; or
 - (d) the Trustee becomes incapable of acting.

If the Trustee resigns or is removed or if a vacancy exists in the office of Trustee for any reason, the Company shall promptly appoint a successor Trustee. Within one year after the successor Trustee takes office, the Holders of a majority in principal amount of the then outstanding Securities may appoint a successor Trustee to replace the successor Trustee appointed by the Company.

If a successor Trustee with respect to the Securities of any one or more Series does not take office within 30 days after the retiring Trustee resigns or is removed, the retiring Trustee, the Company or the Holders of at least a majority in principal amount of the Securities of the applicable Series may petition any court of competent jurisdiction for the appointment of a successor Trustee at the expense of the Company.

A successor Trustee shall deliver a written acceptance of its appointment to the retiring Trustee and to the Company. Immediately after that, the retiring Trustee shall transfer all property held by it as Trustee to the successor Trustee subject to the lien provided for in Section 7.7, the resignation or removal of the retiring Trustee shall become effective, and the successor Trustee shall have all the rights, powers and duties of the Trustee with respect to each Series of Securities for which it is acting as Trustee under this Indenture. A successor Trustee shall mail a notice of its succession to each Securityholder of each such Series. Notwithstanding replacement of the Trustee pursuant to this Section 7.8, the Company's obligations under Section 7.7 hereof shall continue for the benefit of the retiring Trustee with respect to expenses and liabilities incurred by it for actions taken or omitted to be taken in accordance with its rights, powers and duties under this Indenture prior to such replacement.

Section 7.9. Successor Trustee by Merger, Etc.

If the Trustee consolidates with, merges or converts into, or transfers all or substantially all of its corporate trust business to, another corporation, the successor corporation without any further act shall be the successor Trustee, if such successor corporation is eligible and qualified under Section 7.10.

Section 7.10. Eligibility; Disqualification.

This Indenture shall always have a Trustee who satisfies the requirements of TIA § 310(a)(1), (2) and (5). The Trustee shall always have a combined capital and surplus of at least \$25,000,000 as set forth in its most recent published annual report of condition. The Trustee shall comply with TIA § 310(b).

Section 7.11. Preferential Collection of Claims Against Company.

The Trustee is subject to TIA § 311(a), excluding any creditor relationship listed in TIA § 311(b). A Trustee who has resigned or been removed shall be subject to TIA § 311(a) to the extent indicated.

ARTICLE VIII.
SATISFACTION AND DISCHARGE; DEFEASANCE

Section 8.1. Satisfaction and Discharge of Indenture.

This Indenture shall upon Company Order cease to be of further effect (except as hereinafter provided in this Section 8.1), and the Trustee, at the expense of the Company, shall execute instruments acknowledging satisfaction and discharge of this Indenture, when

- (a) either
 - (i) all Securities theretofore authenticated and delivered (other than Securities that have been destroyed, lost or stolen and that have been replaced or paid as provided in Section 2.9) have been delivered to the Trustee for cancellation; or
 - (ii) all such Securities not theretofore delivered to the Trustee for cancellation:
 - (1) have become due and payable, or
 - (2) will become due and payable at their Stated Maturity within one year, or
 - (3) have been called for redemption or 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 (1), (2) or (3) above, has irrevocably deposited or caused to be deposited with the Trustee as trust funds in trust an amount of money or U.S. Government Obligations sufficient for the purpose of paying and discharging the entire indebtedness on such Securities not theretofore delivered to the Trustee for cancellation, for principal and interest to the date of such deposit (in the case of Securities which have become due and payable on or prior to the date of such deposit) or to the Stated Maturity or redemption date, as the case may be;

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

(c) 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 have been complied with.

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee under Section 7.7, and, if money shall have been deposited with the Trustee pursuant to sub-clause (a) of this Section 8.1, the provisions of Sections 2.5, 2.8, 2.9, 8.2 and 8.5 shall survive.

Section 8.2. Application of Trust Funds; Indemnification.

(a) Subject to the provisions of Section 8.5, all money or U.S. Government Obligations deposited with the Trustee pursuant to Section 8.1, all money and U.S. Government Obligations or Foreign Government Obligations deposited with the Trustee pursuant to Section 8.3 or 8.4 and all money received by the Trustee in respect of U.S. Government Obligations or Foreign Government Obligations deposited with the Trustee pursuant to Section 8.3 or 8.4, shall be held in trust and applied by it, in accordance with the provisions of the 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 interest for whose payment such money has been deposited with or received by the Trustee or to make mandatory sinking fund payments or analogous payments as contemplated by Sections 8.3 or 8.4.

(b) The Company shall pay and shall indemnify the Trustee against any tax, fee or other charge imposed on or assessed against U.S. Government Obligations or Foreign Government Obligations deposited pursuant to Sections 8.3 or 8.4 or the interest and principal received in respect of such obligations other than any payable by or on behalf of Holders.

(c) The Trustee shall deliver or pay to the Company from time to time upon Company Order any U.S. Government Obligations or Foreign Government Obligations or money held by it as provided in Sections 8.3 or 8.4 which, in the opinion of a nationally recognized firm of independent certified public accountants or investment bank expressed in a written certification thereof delivered to the Trustee, are then in excess of the amount thereof which then would have been required to be deposited for the

purpose for which such U.S. Government Obligations or Foreign Government Obligations or money were deposited or received. This provision shall not authorize the sale by the Trustee of any U.S. Government Obligations or Foreign Government Obligations held under this Indenture.

Section 8.3. Legal Defeasance of Securities of any Series.

Unless this Section 8.3 is otherwise specified, pursuant to Section 2.2, to be inapplicable to Securities of any Series, the Company shall be deemed to have paid and discharged the entire indebtedness on all the outstanding Securities of any Series on the 91st day after the date of the deposit referred to in sub-clause (d) hereof, and the provisions of this Indenture, as it relates to such outstanding Securities of such Series, shall no longer be in effect (and the Trustee, at the expense of the Company, shall, upon receipt of a Company Order, execute instruments acknowledging the same), except as to:

- (a) the rights of Holders of Securities of such Series to receive, from the trust funds described in sub-clause (d) hereof, (i) payment of the principal of and each installment of principal of and interest on the outstanding Securities of such Series on the Maturity of such principal or installment of principal or interest and (ii) the benefit of any mandatory sinking fund payments applicable to the Securities of such Series on the day on which such payments are due and payable in accordance with the terms of this Indenture and the Securities of such Series;
- (b) the provisions of Sections 2.5, 2.8, 2.9, 8.2, 8.3 and 8.5; and
- (c) the rights, powers, trust and immunities of the Trustee hereunder and the Company's obligations in connection therewith;

provided that, the following conditions shall have been satisfied:

- (d) the Company shall have deposited or caused to be irrevocably deposited (except as provided in Section 8.2(c)) with the Trustee as trust funds in trust for the purpose of making the following payments, specifically pledged as security for and dedicated solely to the benefit of the Holders of such Securities: (i) in the case of Securities of such Series denominated in Dollars, cash in Dollars and/or U.S. Government Obligations, or (ii) in the case of Securities of such Series denominated in a Foreign Currency (other than a composite currency), money and/or Foreign Government Obligations, which through the payment of interest and principal in respect thereof in accordance with their terms (and without reinvestment), will provide, not later than one day before the due date of any payment of money, an amount in cash, sufficient, in the opinion of a nationally recognized firm of independent public accountants or investment bank expressed in a written certification thereof delivered to the Trustee, to pay and discharge each installment of principal of and interest, if any, on and any mandatory sinking fund payments in respect of all the Securities of such Series on the dates such installments of interest or principal and such sinking fund payments are due;

(e) such deposit will not result in a breach or violation of, or constitute a default under, this Indenture or any other agreement or instrument to which the Company is a party or by which it is bound;

(f) no Default or Event of Default with respect to the Securities of such Series shall have occurred and be continuing on the date of such deposit or during the period ending on the 91st day after such date;

(g) the Company shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel to the effect that (i) the Company has received from, or there has been published by, the Internal Revenue Service a ruling, or (ii) since the date of execution of this Indenture, there has been a change in the applicable U.S. federal income tax law, in either case to the effect that, and based thereon such Opinion of Counsel shall confirm that, the Holders of the Securities of such Series will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to U.S. federal income tax on the same amount and in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge had not occurred;

(h) the Company shall have delivered to the Trustee an Officer's Certificate stating that the deposit was not made by the Company with the intent of defeating, hindering, delaying or defrauding any other creditors of the Company; and

(i) the Company shall have delivered to the Trustee an Officer's Certificate and an Opinion of Counsel, each stating that all conditions precedent provided for relating to the defeasance contemplated by this Section 8.3 have been complied with.

Section 8.4. Covenant Defeasance.

Unless this Section 8.4 is otherwise specified pursuant to Section 2.2 to be inapplicable to Securities of any Series, the Company may omit to comply with respect to the Securities of any Series with any term, provision or condition set forth under Sections 4.2 and 4.3, 4.4 and 5.1 as well as any additional covenants specified in a supplemental indenture for such Series of Securities or a Board Resolution or an Officer's Certificate delivered pursuant to Section 2.2 (and the failure to comply with any such covenants shall not constitute a Default or Event of Default with respect to such Series under Section 6.1) and the occurrence of any event specified in a supplemental indenture for such Series of Securities or a Board Resolution or an Officer's Certificate delivered pursuant to Section 2.2.18 and designated as an Event of Default shall not constitute a Default or Event of Default hereunder, with respect to the Securities of such Series, provided that the following conditions shall have been satisfied:

(a) With reference to this Section 8.4, the Company has deposited or caused to be irrevocably deposited (except as provided in Section 8.2(c)) with the Trustee as trust funds in trust for the purpose of making the following payments specifically pledged as security for, and dedicated solely to, the benefit of the Holders of such Securities: (i) in the case of Securities of such Series denominated in Dollars, cash in Dollars and/or U.S. Government Obligations, or (ii) in the case of Securities of such Series denominated in a

Foreign Currency (other than a composite currency), money and/or Foreign Government Obligations, which through the payment of interest and principal in respect thereof in accordance with their terms (and without reinvestment), will provide, not later than one day before the due date of any payment of money, an amount in cash, sufficient, in the opinion of a nationally recognized firm of independent certified public accountants or investment bank expressed in a written certification thereof delivered to the Trustee, to pay and discharge each installment of principal of and interest, if any, on and any mandatory sinking fund payments in respect of the Securities of such Series on the dates such installments of interest or principal and such sinking fund payments are due;

(b) Such deposit will not result in a breach or violation of, or constitute a default under, this Indenture or any other agreement or instrument to which the Company is a party or by which it is bound;

(c) No Default or Event of Default with respect to the Securities of such Series shall have occurred and be continuing on the date of such deposit;

(d) The Company shall have delivered to the Trustee an Opinion of Counsel to the effect that Holders of the Securities of such Series will not recognize income, gain or loss for U.S. federal income tax purposes as a result of such deposit and covenant defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such deposit and covenant defeasance had not occurred;

(e) The Company shall have delivered to the Trustee an Officer's Certificate stating the deposit was not made by the Company with the intent of defeating, hindering, delaying or defrauding any other creditors of the Company; and

(f) The Company shall have 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 covenant defeasance contemplated by this Section 8.4 have been complied with.

Section 8.5. Repayment to Company.

Subject to applicable abandoned property law, the Trustee and the Paying Agent shall pay to the Company upon request any money held by them for the payment of principal or interest that remains unclaimed for two years after such principal or interest has become due and payable. After that, Securityholders entitled to the money must look to the Company for payment as general creditors unless an applicable abandoned property law designates another person.

Section 8.6. Reinstatement.

If the Trustee or the Paying Agent is unable to apply any money deposited with respect to Securities of any Series in accordance with Section 8.1 by reason of any legal proceeding or by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, the obligations of the Company

under this Indenture with respect to the Securities of such Series and under the Securities of such Series shall be revived and reinstated as though no deposit had occurred pursuant to Section 8.1 until such time as the Trustee or the Paying Agent is permitted to apply all such money in accordance with Section 8.1; provided, however, that if the Company has made any payment of principal of or interest on any Securities because of the reinstatement of its obligations, the Company shall be subrogated to the rights of the Holders of such Securities to receive such payment from the money or U.S. Government Obligations held by the Trustee or Paying Agent after payment in full to the Holders.

ARTICLE IX.
AMENDMENTS AND WAIVERS

Section 9.1. Without Consent of Holders.

The Company and the Trustee may amend or supplement this Indenture or the Securities of one or more Series without the consent of any Securityholder:

- (a) to add guarantees with respect to any Series of Securities or secure any Series of Securities;
- (b) to surrender any of the Company's rights or powers under this Indenture;
- (c) to add covenants or Events of Default for the benefit of the Securityholders of any Series of Securities;
- (d) to comply with the applicable rules or procedures of the Depositary;
- (e) to cure any ambiguity, defect or inconsistency, as described in the Officer's Certificate delivered pursuant to Section 10.4;
- (f) to comply with Article V;
- (g) to provide for uncertificated Securities in addition to or in place of certificated Securities;
- (h) to make any change that does not materially adversely affect the rights of any Securityholder;
- (i) to provide for the issuance of and establish the form and terms and conditions of Securities of any Series as permitted by this Indenture;
- (j) 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;
- (k) to comply with requirements of the SEC in order to effect or maintain the qualification of this Indenture under the TIA;

(l) 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

(m) to change or eliminate any of the provisions of this Indenture, *provided* that any such change or elimination shall not be effective with respect to any outstanding Securities of any Series created prior to the execution of such supplemental indenture which is entitled to the benefit of such provision.

Section 9.2. With Consent of Holders.

The Company and the Trustee may enter into a supplemental indenture with the written consent of the Holders of at least a majority in 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 offer for the Securities of such Series), for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of any supplemental indenture or of modifying in any manner the rights of the Securityholders of each such Series. Except as provided in Section 6.13, the Holders of at least a majority in principal amount of the outstanding Securities of any Series by written notice to the Trustee (including consents obtained in connection with a tender offer or exchange offer for the Securities of such Series) may waive compliance by the Company with any provision of this Indenture or the Securities with respect to such Series.

It shall not be necessary for the consent of the Holders of Securities under this Section 9.2 to approve the particular form of any proposed supplemental indenture or waiver, but it shall be sufficient if such consent approves the substance thereof. After a supplemental indenture or waiver under this Section 9.2 becomes effective, the Company shall mail to the Holders of Securities affected thereby, a notice briefly describing the supplemental indenture or waiver. Any failure by the Company to mail or publish such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such supplemental indenture or waiver.

Section 9.3. Limitations.

Without the consent of each Securityholder affected, an amendment or waiver may not:

- (a) reduce the principal amount of Securities whose Holders must consent to an amendment, supplement or waiver;
- (b) reduce the rate of or extend the time for payment of interest (including default interest) on any Security or that Series;
- (c) reduce the principal of, or change the Stated Maturity of, any Security or reduce the amount of, or postpone the date fixed for, the payment of any sinking fund or analogous obligation;
- (d) reduce the principal amount of Discount Securities payable upon acceleration of the maturity thereof;

(e) waive a Default or Event of Default in the payment of the principal of or interest, if any, on any Security (except a rescission of acceleration of the Securities of any Series by the Holders of at least a majority in principal amount of the then outstanding Securities of such Series and a waiver of the payment default that resulted from such acceleration);

(f) make the principal of or interest, if any, on any Security payable in any currency other than that stated in the Security;

(g) make any change in Sections 6.8 or 6.13 or this Section 9.3; or

(h) waive a redemption payment with respect to any Security.

Section 9.4. Compliance with Trust Indenture Act.

Every amendment to this Indenture or the Securities of one or more Series shall be set forth in a supplemental indenture hereto that complies with the TIA as then in effect.

Section 9.5. Revocation and Effect of Consents.

Until an amendment is set forth in a supplemental indenture or a waiver becomes effective, a consent to it by a Holder of a Security is a continuing consent by the Holder and every subsequent Holder of a Security or portion of a Security that evidences the same debt as the consenting Holder's Security, even if notation of the consent is not made on any Security.

Any amendment or waiver once effective shall bind every Securityholder of each Series affected by such amendment or waiver unless it is of the type described in any of sub-clauses (a) through (h) of Section 9.3. In that case, the amendment or waiver shall bind each Holder of a Security who has consented to it and every subsequent Holder of a Security or portion of a Security that evidences the same debt as the consenting Holder's Security.

The Company may, but shall not be obligated to, fix a record date for the purpose of determining the Holders entitled to give their consent or take any other action described above or required or permitted to be taken pursuant to this Indenture. If a record date is fixed, then notwithstanding the immediately preceding paragraph, those Persons who were Holders at such record date (or their duly designated proxies), and only those persons, shall be entitled to give such consent or to revoke any consent previously given or take any such action, whether or not such Persons continue to be Holders after such record date. No such consent shall be valid or effective for more than 120 days after such record date.

Section 9.6. Notation on or Exchange of Securities.

The Company or the Trustee may place an appropriate notation about an amendment or waiver on any Security of any Series thereafter authenticated. The Company in exchange for Securities of that Series may issue and the Trustee shall authenticate upon request new Securities of that Series that reflect the amendment or waiver.

Section 9.7. Trustee Protected.

In executing, or accepting the additional trusts created by, any supplemental indenture permitted by this Article or the modifications thereby of the trusts created by this Indenture, the Trustee shall receive, and (subject to Section 7.1) shall be fully protected in conclusively relying upon, an Officer's Certificate or an Opinion of Counsel or both complying with Section 10.4 and stating that the supplemental indenture is the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, subject to customary exceptions. The Trustee shall sign all supplemental indentures upon delivery of such an Officer's Certificate or Opinion of Counsel or both, except that the Trustee need not sign any supplemental indenture that, in its sole discretion, adversely affects its rights.

ARTICLE X.
MISCELLANEOUS

Section 10.1. Trust Indenture Act Controls.

If any provision of this Indenture limits, qualifies, or conflicts with another provision which is required or deemed to be included in this Indenture by the TIA, such required or deemed provision shall control.

Section 10.2. Notices.

Any request, demand, notice or communication by the Company or the Trustee to the other, or by a Holder to the Company or the Trustee, is duly given if in writing and delivered in person or mailed by first-class mail:

if to the Company:

EMCORE Corporation
2015 W. Chestnut Street
Alhambra, California 91803
Attention: Ryan Hochgesang, Vice President & General Counsel
Telephone: (626) 293-3400

if to the Trustee:

Attention: _____

The Company or the Trustee by notice to the other may designate additional or different addresses for subsequent notices or communications.

Any notice or communication to a Securityholder shall be mailed by first-class mail to his address shown on the register kept by the Registrar. Failure to mail a notice or

communication to a Securityholder of any Series or any defect in it shall not affect its sufficiency with respect to other Securityholders of that or any other Series.

If a notice or communication is mailed or published in the manner provided above, within the time prescribed, it is duly given, whether or not the Securityholder receives it.

If the Company mails a notice or communication to Securityholders, it shall mail a copy to the Trustee and each Agent at the same time.

Notwithstanding any other provision of this Indenture or any Security, where this Indenture or any Security provides for notice of any event (including any notice of redemption) to a Holder of a Global Security (whether by mail or otherwise), such notice shall be sufficiently given to the Depositary for such Security (or its designee) pursuant to the customary procedures of such Depositary.

Section 10.3. Communication by Holders with Other Holders.

Securityholders of any Series may communicate pursuant to TIA § 312(b) with other Securityholders of that Series or any other Series with respect to their rights under this Indenture or the Securities of that Series or all Series. The Company, the Trustee, the Registrar and anyone else shall have the protection of TIA § 312(c).

Section 10.4. Certificate and Opinion as to Conditions Precedent.

Upon any request or application by the Company to the Trustee to take any action under this Indenture, the Company shall furnish to the Trustee:

- (a) an Officer's Certificate stating that, in the opinion of the signers, all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with; and
- (b) an Opinion of Counsel stating that, in the opinion of such counsel, all such conditions precedent have been complied with.

Section 10.5. Statements Required in Certificate or Opinion.

Each certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture (other than a certificate provided pursuant to TIA § 314(a)(4)) shall comply with the provisions of TIA § 314(e) and shall include:

- (a) a statement that the person making such certificate or opinion has read such covenant or condition;
- (b) 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;

(c) a statement that, in the opinion of such person, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been complied with; and

(d) a statement as to whether or not, in the opinion of such person, such condition or covenant has been complied with.

Section 10.6. Rules by Trustee and Agents.

The Trustee may make reasonable rules for action by or a meeting of Securityholders of one or more Series. Any Agent may make reasonable rules and set reasonable requirements for its functions.

Section 10.7. Legal Holidays.

Unless otherwise provided by Board Resolution, Officer's Certificate or supplemental indenture hereto for a particular Series, a "*Legal Holiday*" is any day that is not a Business Day. If a payment date is a Legal Holiday at a place of payment, payment may be made at that place on the next succeeding day that is not a Legal Holiday, and no interest shall accrue for the intervening period.

Section 10.8. No Recourse Against Others.

A director, officer, employee or stockholder (past or present), as such, of the Company shall not have any liability for any obligations of the Company under the Securities or this Indenture or for any claim based on, in respect of or by reason of such obligations or their creation. Each Securityholder by accepting a Security waives and releases all such liability. The waiver and release are part of the consideration for the issue of the Securities.

Section 10.9. Counterparts.

This Indenture may be executed in any number of counterparts and by the parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. The exchange of copies of this Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Indenture as to the parties hereto and may be used in lieu of the original Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes.

Section 10.10. Governing Law; Jury Trial Waiver.

THIS INDENTURE AND THE SECURITIES, INCLUDING ANY CLAIM OR CONTROVERSY ARISING OUT OF OR RELATING TO THIS INDENTURE OR THE SECURITIES, SHALL BE GOVERNED BY THE LAWS OF THE STATE OF NEW YORK (WITHOUT REGARD TO THE CONFLICTS OF LAWS PROVISIONS THEREOF OTHER THAN SECTION 5-1401 OF THE GENERAL OBLIGATIONS LAW).

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 ARISING OUT OF OR RELATING TO THIS INDENTURE, THE SECURITIES OR THE TRANSACTION CONTEMPLATED HEREBY.

Section 10.11. No Adverse Interpretation of Other Agreements.

This Indenture may not be used to interpret another indenture, loan or debt agreement of the Company or a Subsidiary of the Company. Any such indenture, loan or debt agreement may not be used to interpret this Indenture.

Section 10.12. Successors.

All agreements of the Company in this Indenture and the Securities shall bind its successor. All agreements of the Trustee in this Indenture shall bind its successor.

Section 10.13. Severability.

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.

Section 10.14. Table of Contents, Headings, Etc.

The Table of Contents, Cross Reference Table, and headings of the Articles and Sections of this Indenture have been inserted for convenience of reference only, are not to be considered a part hereof, and shall in no way modify or restrict any of the terms or provisions hereof.

Section 10.15. Securities in a Foreign Currency.

Unless otherwise specified in a Board Resolution, a supplemental indenture hereto or an Officer's Certificate delivered pursuant to Section 2.2 of this Indenture with respect to a particular Series of Securities, whenever for purposes of this Indenture any action may be taken by the Holders of a specified percentage in aggregate principal amount of Securities of all Series or all Series affected by a particular action at the time outstanding and, at such time, there are outstanding Securities of any Series which are denominated in more than one currency, then the principal amount of Securities of such Series which shall be deemed to be outstanding for the purpose of taking such action shall be determined by converting any such other currency into a currency that is designated upon issuance of any particular Series of Securities. Unless otherwise specified in a Board Resolution, a supplemental indenture hereto or an Officer's Certificate delivered pursuant to Section 2.2 of this Indenture with respect to a particular Series of Securities, such conversion shall be at the spot rate for the purchase of the designated currency as published in The Financial Times in the "Currency Rates" section (or, if The Financial Times is no longer published, or if such information is no longer available in The Financial Times, such source as may be selected in good faith by the Company) on any date of determination. The provisions of this paragraph shall apply in determining the equivalent principal amount in respect

of Securities of a Series denominated in currency other than Dollars in connection with any action taken by Holders of Securities pursuant to the terms of this Indenture.

All decisions and determinations provided for in the preceding paragraph shall, in the absence of manifest error, to the extent permitted by law, be conclusive for all purposes and irrevocably binding upon the Trustee and all Holders.

Section 10.16. Judgment Currency.

The Company agrees, to the fullest extent that it may effectively do so under applicable law, that (a) if for the purpose of obtaining judgment in any court it is necessary to convert the sum due in respect of the principal of or interest or other amount on the Securities of any Series (the “*Required Currency*”) into a currency in which a judgment will be rendered (the “*Judgment Currency*”), the rate of exchange used shall be the rate at which in accordance with normal banking procedures the Trustee could purchase in The City of New York the Required Currency with the Judgment Currency on the day on which final unappealable judgment is entered, unless such day is not a Business Day, then the rate of exchange used shall be the rate at which in accordance with normal banking procedures the Trustee could purchase in The City of New York the Required Currency with the Judgment Currency on the Business Day preceding the day on which final unappealable judgment is entered and (b) its obligations under this Indenture to make payments in the Required Currency (i) shall not be discharged or satisfied by any tender, or any recovery pursuant to any judgment (whether or not entered in accordance with subsection (a)), in any currency other than the Required Currency, except to the extent that such tender or recovery shall result in the actual receipt, by the payee, of the full amount of the Required Currency expressed to be payable in respect of such payments, (ii) shall be enforceable as an alternative or additional cause of action for the purpose of recovering in the Required Currency the amount, if any, by which such actual receipt shall fall short of the full amount of the Required Currency so expressed to be payable, and (iii) shall not be affected by judgment being obtained for any other sum due under this Indenture.

Section 10.17. Force Majeure.

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 best efforts which are consistent with accepted practices in the banking industry to resume performance as soon as practicable under the circumstances.

Section 10.18. U.S.A. Patriot Act.

The parties hereto acknowledge that in accordance with Section 326 of the U.S.A. Patriot Act, the Trustee, like all financial institutions and in order to help fight the funding of terrorism and money laundering, is required to obtain, verify, and record information that identifies each person or legal entity that establishes a relationship or opens an account with the

Trustee. The parties to this Indenture agree that they will provide the Trustee with such information as it may request in order for the Trustee to satisfy the requirements of the U.S.A. Patriot Act.

ARTICLE XI. SINKING FUNDS

Section 11.1. Applicability of Article.

The provisions of this Article shall be applicable to any sinking fund for the retirement of the Securities of a Series if so provided by the terms of such Securities pursuant to Section 2.2 and except as otherwise permitted or required by any form of Security of such Series issued pursuant to this Indenture.

The minimum amount of any sinking fund payment provided for by the terms of the Securities of any Series is herein referred to as a “*mandatory sinking fund payment*” and any other amount provided for by the terms of Securities of such Series is herein referred to as an “*optional sinking fund payment*.” If provided for by the terms of Securities of any Series, the cash amount of any sinking fund payment may be subject to reduction as provided in Section 11.2. Each sinking fund payment shall be applied to the redemption of Securities of any Series as provided for by the terms of the Securities of such Series.

Section 11.2. Satisfaction of Sinking Fund Payments with Securities.

The Company may, in satisfaction of all or any part of any sinking fund payment with respect to the Securities of any Series to be made pursuant to the terms of such Securities (a) deliver outstanding Securities of such Series to which such sinking fund payment is applicable (other than any of such Securities previously called for mandatory sinking fund redemption) and (b) apply as credit Securities of such Series to which such sinking fund payment is applicable and which have been repurchased by the Company or redeemed either at the election of the Company pursuant to the terms of the Securities of such Series (except pursuant to any mandatory sinking fund) or through the application of permitted optional sinking fund payments or other optional redemptions pursuant to the terms of such Securities, provided that such Securities have not been previously so credited. Such Securities shall be received by the Trustee, together with an Officer’s Certificate with respect thereto, not later than 15 days prior to the date on which the Trustee begins the process of selecting Securities for redemption, and shall be credited for such purpose by the Trustee at the price specified in such Securities for redemption through operation of the sinking fund and the amount of such sinking fund payment shall be reduced accordingly. If as a result of the delivery or credit of Securities in lieu of cash payments pursuant to this Section 11.2, the principal amount of Securities of such Series to be redeemed in order to exhaust the aforesaid cash payment shall be less than \$100,000, the Trustee need not call Securities of such Series for redemption, except upon receipt of a Company Order that such action be taken, and such cash payment shall be held by the Trustee or a Paying Agent and applied to the next succeeding sinking fund payment, provided, however, that the Trustee or such Paying Agent shall from time to time upon receipt of a Company Order pay over and deliver to the Company any cash payment so being held by the Trustee or such Paying Agent upon delivery by the Company to the Trustee of Securities of that Series purchased by the

Company having an unpaid principal amount equal to the cash payment required to be released to the Company.

Section 11.3. Redemption of Securities for Sinking Fund.

Not less than 45 days (unless otherwise indicated in the Board Resolution, supplemental indenture hereto or Officer's Certificate in respect of a particular Series of Securities) prior to each sinking fund payment date for any Series of Securities, the Company will deliver to the Trustee an Officer's Certificate specifying the amount of the next ensuing mandatory sinking fund payment for that Series pursuant to the terms of that Series, 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 of Securities of that Series pursuant to Section 11.2, and the optional amount, if any, to be added in cash to the next ensuing mandatory sinking fund payment, and the Company shall thereupon be obligated to pay the amount therein specified. Not less than 30 days (unless otherwise indicated in the Board Resolution, Officer's Certificate or supplemental indenture in respect of a particular Series of Securities) before each such sinking fund payment date the Trustee shall select the Securities to be redeemed upon such sinking fund payment date in the manner specified in Section 3.2 and 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 3.3. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Sections 3.4, 3.5 and 3.6.

ARTICLE XII.
SUBORDINATION OF SECURITIES

Section 12.1. Subordination of Terms.

The payment by the Company of the principal of, premium, if any, and interest on any Series of Securities issued under this Indenture shall be subordinated to the extent set forth in a Board Resolution, supplemental indenture hereto or Officer's Certificate relating to such Series of Securities.

[Signature page follows]

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

EMCORE CORPORATION, as Issuer

By: _____
Name:
Its:

, as Trustee

By: _____
Name:
Its:



Connell Foley LLP
 56 Livingston Avenue
 Roseland, NJ 07068
 P 973.535.0500 F 973.535.9217

January 6, 2020

EMCORE Corporation
 2015 W. Chestnut Street
 Alhambra, CA 91803

Re: Registration of Securities of EMCORE Corporation

Ladies and Gentlemen:

We have acted as special New Jersey counsel for EMCORE Corporation, a New Jersey corporation (the “Company”), in connection with the filing of the Registration Statement on Form S-3 (the “Registration Statement”) with the Securities and Exchange Commission (the “SEC”) under the Securities Act of 1933, as amended (the “Securities Act”), relating to the registration under the Securities Act and the proposed issuance and sale from time to time pursuant to Rule 415 under the Securities Act of up to \$30,000,000 of: (i) shares of common stock, no par value (the “Common Shares”) and shares of preferred stock, par value \$0.00001 per share (the “Preferred Shares” and, together with the Common Shares, the “Shares”); (ii) one or more series of debt securities of the Company, which may be either senior debt securities or subordinated debt securities and may be convertible into or exchangeable for Common Shares and/or Preferred Shares (the “Debt Securities”); (iii) warrants for the purchase of Shares and Debt Securities (the “Warrants”); (iv) rights for the purchase of Shares, Debt Securities or Warrants (the “Rights”); and (v) units comprising two or more of the foregoing securities (the “Units” and, together with the Shares, the Debt Securities, the Warrants and the Rights, individually, an “Offered Security” and collectively, the “Offered Securities”).

Unless otherwise provided in any prospectus supplement forming a part of the Registration Statement relating to a particular series of the Debt Securities, the Debt Securities will be issued pursuant to one or more indentures in the form filed as an exhibit to the Registration Statement, as amended or supplemented from time to time (the “Indenture”), between the Company, as obligor, and a trustee chosen by the Company and qualified to act as such under the Trust Indenture Act of 1939, as amended (the “Trustee”).

In rendering this opinion, we have examined originals or copies, certified or otherwise identified to our satisfaction, of the Registration Statement, the Restated Certificate of Incorporation of the Company dated April 4, 2008, as amended through March 19, 2018 (the “Certificate of Incorporation”), the By-Laws of the Company, as amended through March 19,

Roseland

Jersey City

Newark

New York

Cherry Hill

Philadelphia

www.connellfoley.com

2018, the minutes of meetings of the stockholders and the Board of Directors of the Company as provided to us by the Company, and such other documents, corporate records, certificates of corporate officers and public officials and such other instruments as we have deemed necessary or advisable for the purpose of rendering this opinion.

In such examination, we have assumed, with your consent and without independent investigation, that: (a) each document submitted to us for review is authentic, accurate, and complete, each such document that is a copy conforms to an authentic original, and all signatures on each such document are genuine; and (b) each certificate issued by a governmental official, office, or agency concerning an entity's status, including, but not limited to, certificates of corporate status, is accurate, complete, and authentic. As to various questions of fact material to our opinion, we have relied on statements and certificates of officers and representatives of the Company and public officials and have not sought to independently verify such matters.

Based upon and subject to the foregoing, and assuming that (i) the Registration Statement and any supplements and amendments thereto (including post-effective amendments) will have become effective and will comply with all applicable laws; (ii) the Registration Statement will be effective and will comply with all applicable laws at the time the Offered Securities are offered or issued as contemplated by the Registration Statement; (iii) a prospectus supplement will have been prepared and filed with the SEC describing the Offered Securities offered thereby and will comply with all applicable laws; (iv) all Offered Securities will be issued and sold in compliance with all applicable federal and state securities laws and in the manner stated in the Registration Statement and the appropriate prospectus supplement; (v) none of the terms of any Offered Security to be established subsequent to the date hereof, nor the issuance and delivery of such Offered Security, nor the compliance by the Company with the terms of such Offered Security will violate any applicable law or will result in a violation of any provision of any instrument or agreement then binding upon the Company or any restriction imposed by any court or governmental body having jurisdiction over the Company; (vi) a definitive purchase, underwriting or similar agreement and any other necessary agreement with respect to any Offered Securities offered or issued will have been duly authorized and validly executed and delivered by the Company and the other parties thereto; and (vii) any Offered Securities issuable upon conversion, exchange or exercise of any Offered Security being offered or issued will be duly authorized, created and, if appropriate, reserved for issuance upon such conversion, exchange or exercise, we are of opinion as follows:

1. With respect to any of the Common Shares, assuming that any Common Shares (including any such Common Shares included in Rights and Units) issued by the Company pursuant to the Registration Statement, from time to time, will not exceed the maximum authorized number of Common Shares under the Certificate of Incorporation, minus that number of Common Shares that may have been issued and are outstanding, or are reserved for issuance for other purposes, at such

time, when duly authorized and issued against the full payment specified therefor, which must have a value not less than the par value thereof, such Common Shares will be validly issued, fully paid and non-assessable.

2. With respect to any of the Preferred Shares, assuming that any Preferred Shares (including any such Preferred Shares included in Warrants, Rights and Units) issued by the Company pursuant to the Registration Statement, from time to time, will not exceed the maximum authorized number of Preferred Shares under the Certificate of Incorporation, minus that number of Preferred Shares that may have been issued and are outstanding, or are reserved for issuance for other purposes, at such time, when duly authorized and issued against the full payment specified therefor, which must have a value not less than the par value thereof, such Preferred Shares will be validly issued, fully paid and non-assessable.
3. With respect to the Debt Securities to be issued under the Indenture, assuming that the Company and the Trustee have duly authorized, executed and delivered the Indenture, when (A) the Trustee has been qualified to act as trustee under the Indenture, (B) the Indenture has been qualified under the Trust Indenture Act of 1939, as amended, (C) the Board of Directors of the Company or a duly constituted and acting committee thereof (such Board of Directors or committee thereof being hereinafter referred to as the “Board”) has taken all necessary corporate action to approve the issuance and terms of a particular series of such Debt Securities, the terms of the offering thereof and related matters, and (D) such Debt Securities have been duly executed, authenticated, issued and delivered in accordance with the provisions of the Indenture and the applicable definitive purchase, underwriting or similar agreement approved by the Board upon payment of the consideration therefor provided for therein, such Debt Securities will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms (subject to applicable bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or other similar laws affecting creditors’ rights generally from time to time in effect and subject to general principles of equity, including concepts of materiality, reasonableness, good faith and fair dealing, regardless of whether such enforceability is considered in a proceeding in equity or at law).
4. With respect to the Warrants, assuming any Warrants (including any Warrants included in Rights and Units) issued by the Company pursuant to the Registration Statement, from time to time, will be issued under one or more valid, binding, and enforceable warrant agreements (each a “Warrant Agreement”), when duly authorized, executed and delivered against the payment specified therefor and

pursuant to a Warrant Agreement or agreements duly authorized, executed and delivered by the Company and the holder of the Warrants, such Warrants will be legally issued binding obligations of the Company enforceable against the Company in accordance with their respective terms (subject to applicable bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or other similar laws affecting creditors' rights generally from time to time in effect and subject to general principles of equity, including concepts of materiality, reasonableness, good faith and fair dealing, regardless of whether such enforceability is considered in a proceeding in equity or at law).

5. With respect to the Rights, assuming any Rights issued by the Company pursuant to the Registration Statement may be issued pursuant to a valid, binding, and enforceable Rights Agreement (the "Rights Agreement"), when duly authorized, executed and delivered against payment specified therefor and pursuant to the Rights Agreement, such Rights will be legally issued binding obligations of the Company enforceable against the Company in accordance with their respective terms (subject to applicable bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or other similar laws affecting creditors' rights generally from time to time in effect and subject to general principles of equity, including concepts of materiality, reasonableness, good faith and fair dealing, regardless of whether such enforceability is considered in a proceeding in equity or at law).
6. With respect to the Units, assuming any Units issued by the Company pursuant to the Registration Statement may be issued pursuant to a valid, binding, and enforceable Unit Agreement (the "Unit Agreement") between the Company and a bank or trust company as unit agent, when duly authorized, executed and delivered against payment specified therefor and pursuant to the Unit Agreement, such Units will be legally issued binding obligations of the Company enforceable against the Company in accordance with their respective terms (subject to applicable bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or other similar laws affecting creditors' rights generally from time to time in effect and subject to general principles of equity, including concepts of materiality, reasonableness, good faith and fair dealing, regardless of whether such enforceability is considered in a proceeding in equity or at law).

Notwithstanding anything contained herein which may be construed to the contrary, this opinion is based, as to matters of law, solely on the laws of the State of New Jersey. We express no opinion relating to: (a) the laws or regulations of any jurisdiction other than the State of New Jersey (including, but not limited to, the federal laws of the United States); or (b) the application

of, or compliance with, any foreign, federal or state law or regulation with respect to the power, authority or competence of any party, other than the Company, to the Indenture.

This opinion is rendered as of the date hereof, and we express no opinion as to any event, fact, circumstance, or development subsequent to the date of this opinion. We undertake no, and hereby disclaim any, obligation to advise you of any change in any matter set forth in this opinion that may result from any change of law or fact that may arise after the date of this opinion. Our opinion is limited to the matters stated herein, and no opinion is to be implied or inferred beyond the matters stated herein.

We are furnishing this opinion to the Company solely in connection with the Registration Statement. We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement and to the reference to us under the caption “Legal Matters” in the prospectus included in the Registration Statement. In giving this consent, we do not hereby admit that we are acting within the category of persons whose consent is required under Section 7 of the Securities Act or the rules or regulations of the SEC promulgated thereunder.

Very truly yours,

/s/ Connell Foley LLP

Consent of Independent Registered Public Accounting Firm

The Board of Directors
EMCORE Corporation:

We consent to the use of our reports dated December 10, 2019, with respect to the consolidated balance sheets of EMCORE Corporation and subsidiaries as of September 30, 2019 and 2018, and the related consolidated statements of operations and comprehensive (loss) income, shareholders' equity, and cash flows for each of the years in the three-year period ended September 30, 2019, and the related notes, and the effectiveness of internal control over financial reporting as of September 30, 2019, incorporated herein by reference and to the reference to our firm under the heading "Experts" in the prospectus.

Our report dated December 10, 2019, on the effectiveness of internal control over financial reporting as of September 30, 2019, contains an explanatory paragraph that states management of EMCORE Corporation excluded from its assessment of the effectiveness of internal control over financial reporting Systron Donner Inertial, Inc.'s (SDI) internal control over financial reporting associated with 25% of total assets and 11% of total revenue included in the consolidated financial statements of EMCORE Corporation and subsidiaries as of and for the year ended September 30, 2019. Our report also excludes an evaluation of the internal control over financial reporting of SDI.

/s/ **KPMG LLP**

Irvine, California
January 6, 2020

Consent of Independent Auditors

We consent to the reference to our firm under the caption “Experts” in the Registration Statement (Form S-3) and related Prospectus of EMCORE Corporation for the registration of common stock, preferred stock, debt securities, warrants, rights and units and to the incorporation by reference therein of our report dated August 22, 2019, with respect to the financial statements of Systron Donner Inertial, Inc. included in EMCORE Corporation’s Current Report on Form 8-K/A dated August 23, 2019, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Los Angeles, CA
January 6, 2020
