

CME Securities Clearing Inc. CA-1 Exhibit E-2A(1)

**BY-LAWS
OF
CME SECURITIES CLEARING INC.**

(hereinafter called the "Corporation")

**ARTICLE I
OFFICES**

Section 1. Registered Office. The registered office of the Corporation shall be 1209 Orange Street, Wilmington, County of New Castle, State of Delaware, 19808.

Section 2. Other Offices. The Corporation may also have offices at such other places, both within and without the State of Delaware, as the Board of Directors may from time to time determine.

**ARTICLE II
MEETINGS OF STOCKHOLDERS**

Section 1. Place of Meetings. Meetings of the stockholders for the election of directors or for any other purpose shall be held at such time and place, either within or without the State of Delaware as shall be designated from time to time by the Board of Directors. The Board of Directors may, in its sole discretion, determine that a meeting of the stockholders shall not be held at any place, but may instead be held solely by means of remote communication in the manner authorized by Section 211 of the General Corporation Law of the State of Delaware (the "DGCL").

Section 2. Annual Meetings. The Annual Meeting of Stockholders for the election of directors shall be held on such date and at such time as shall be designated from time to time by the Board of Directors. Any other proper business may be transacted at the Annual Meeting of Stockholders.

Section 3. Special Meetings. Unless otherwise required by law or by the certificate of incorporation of the Corporation, as amended and restated from time to time (the "Certificate of Incorporation"), Special Meetings of Stockholders, for any purpose or purposes, may be called by either (i) the Chairman of the Board of Directors, if there be one, or (ii) the President, (iii) any Vice President, if there be one, (iv) the Secretary or (v) any Assistant Secretary, if there be one, and shall be called by any such officer at the request in writing of (i) the Board of Directors, (ii) a committee of the Board of Directors that has been duly designated by the Board of Directors and whose powers and authority include the power to call such meetings or (iii) stockholders owning a majority of the capital stock of the Corporation issued and outstanding and entitled to vote on the matter for which such Special Meeting of Stockholders is called. Such request shall state the purpose or purposes of the proposed meeting. At a Special Meeting of Stockholders, only such business shall be conducted as shall be specified in the notice of meeting (or any supplement thereto).

Section 4. Notice. Whenever stockholders are required or permitted to take any action at a meeting, a notice of the meeting shall be given in accordance with Section 232 of the DGCL, and such notice shall state the place, if any, date and hour of the meeting, the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, the record date for determining the stockholders

entitled to vote at such meeting, if such date is different from the record date for determining stockholders entitled to notice of such meeting and, in the case of a Special Meeting, the purpose or purposes for which the meeting is called. Unless otherwise required by law, the notice of any meeting shall be given not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting as of the record date for determining stockholders entitled to notice of such meeting.

Section 5. Adjournments and Postponements. Any meeting of the stockholders may be adjourned or postponed from time to time by the chairman of such meeting or by the Board of Directors, without the need for approval thereof by stockholders to reconvene or convene, respectively, at the same or some other place, and notice need not be given of any such adjourned or postponed meeting (including an adjournment taken to address a technical failure to convene or continue a meeting using remote communication) if the time and place, if any, thereof, and the means of remote communication, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such adjourned or postponed meeting are (i) with respect to an adjourned meeting, (a) announced at the meeting at which the adjournment is taken, (b) displayed during the time scheduled for the meeting, on the same electronic network used to enable stockholders and proxy holders to participate in the meeting by means of remote communication, or (c) set forth in the notice of meeting given in accordance with Section 4 of this Article II, or (ii) with respect to a postponed meeting, are publicly announced. At the adjourned or postponed meeting, the Corporation may transact any business which might have been transacted at the original meeting. If the adjournment or postponement is for more than thirty (30) days, notice of the adjourned or postponed meeting in accordance with the requirements of Section 4 hereof shall be given to each stockholder of record entitled to vote at the meeting. If, after the adjournment or postponement, a new record date for stockholders entitled to vote is fixed for the adjourned or postponed meeting, the Board of Directors shall fix a new record date for notice of such adjourned or postponed meeting in accordance with Section 10 of this Article II, and shall give notice of the adjourned or postponed meeting to each stockholder of record entitled to vote at such adjourned or postponed meeting as of the record date fixed for notice of such adjourned or postponed meeting.

Section 6. Quorum. Unless otherwise required by the DGCL or other applicable law or the Certificate of Incorporation, the holders of a majority of the Corporation's capital stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business. A quorum, once established, shall not be broken by the withdrawal of enough votes to leave less than a quorum. If, however, such quorum shall not be present or represented at any meeting of the stockholders, the stockholders entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, in the manner provided in Section 5 of this Article II, until a quorum shall be present or represented.

Section 7. Voting. Unless otherwise required by law, the Certificate of Incorporation or these By-laws, any question brought before any meeting of stockholders, other than the election of directors, shall be decided by the vote of the holders of a majority of the total number of votes of the Corporation's capital stock present at the meeting in person or represented by proxy and entitled to vote on such question, voting as a single class. Unless otherwise provided in the Certificate of Incorporation, and subject to Section 5 of Article V hereof, each stockholder represented at a meeting of stockholders shall be entitled to cast one (1) vote for each share of the capital stock entitled to vote thereat held by such stockholder. Such votes may be cast in person or by proxy but no proxy shall be voted on or after three years from its date, unless such proxy provides for a longer period. The Board of Directors, in its discretion, or the

officer of the Corporation presiding at a meeting of stockholders, in such officer's discretion, may require that any votes cast at such meeting shall be cast by written ballot.

Section 8. Consent of Stockholders in Lieu of Meeting. Unless otherwise provided in the Certificate of Incorporation, any action required or permitted to be taken at any Annual or Special Meeting of Stockholders of the Corporation, may be taken without a meeting, without prior notice and without a vote, if a consent or consents setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted and shall be delivered to the Corporation in accordance with Section 228(d) of the DGCL. A consent must be set forth in writing or in an electronic transmission. No consent shall be effective to take the corporate action referred to therein unless consents signed by a sufficient number of holders to take action are delivered to the Corporation in the manner required by this Section 8 within sixty (60) days of the first date on which a consent is so delivered to the Corporation. Any person executing a consent may provide, whether through instruction to an agent or otherwise, that such consent will be effective at a future time (including a time determined upon the happening of an event), no later than sixty (60) days after such instruction is given or such provision is made, if evidence of such instruction or provision is provided to the Corporation. If the person is not a stockholder of record when the consent is executed, the consent shall not be valid unless the person is a stockholder of record as of the record date for determining stockholders entitled to consent to the action. Unless otherwise provided, any such consent shall be revocable prior to its becoming effective. Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing. Prompt notice of the taking of the corporate action without a meeting by less than unanimous consent shall be given to those stockholders who have not consented and who, if the action had been taken at a meeting, would have been entitled to notice of the meeting if the record date for notice of such meeting had been the date that consents signed by a sufficient number of holders to take the action were delivered to the Corporation as provided above in this Section 8.

Section 9. List of Stockholders Entitled to Vote. The officer of the Corporation who has charge of the stock ledger of the Corporation shall prepare and make, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting; provided, however, if the record date for determining the stockholders entitled to vote is less than ten (10) days before the meeting date, the list shall reflect the stockholders entitled to vote as of the tenth (10th) day before the meeting date. Such list shall be arranged in alphabetical order, and show the address of each stockholder and the number of shares registered in the name of each stockholder; provided, that the Corporation shall not be required to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, for a period of at least ten days prior to the meeting (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the principal place of business of the Corporation. In the event that the Corporation determines to make the list available on an electronic network, the Corporation may take reasonable steps to ensure that such information is available only to stockholders of the Corporation.

Section 10. Record Date.

(a) In order that the Corporation may determine the stockholders entitled to notice of any meeting of the stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than sixty (60) nor less than ten (10) days before the date of such meeting. If the Board of Directors so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the Board of Directors determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of and to vote at a meeting of the stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of the stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for determination of stockholders entitled to vote at the adjourned meeting, and in such case shall also fix, as the record date for stockholders entitled to notice of such adjourned meeting, the same or an earlier date as that fixed for determination of stockholders entitled to vote at the adjourned meeting in accordance with the foregoing provisions of this Section 10.

(b) In order that the Corporation may determine the stockholders entitled to consent to corporate action without a meeting, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than ten (10) days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. If no record date has been fixed by the Board of Directors, the record date for determining stockholders entitled to consent to corporate action without a meeting, when no prior action by the Board of Directors is required by applicable law, shall be the first date on which a signed consent setting forth the action taken or proposed to be taken is delivered to the Corporation in accordance with Section 228(d) of the DGCL. If no record date has been fixed by the Board of Directors and prior action by the Board of Directors is required by applicable law, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting shall be at the close of business on the day on which the Board of Directors adopts the resolution taking such prior action.

Section 11. Stock Ledger. The stock ledger of the Corporation shall be the only evidence as to who are the stockholders entitled to examine the stock ledger, the list required by Section 9 of this Article II or the books of the Corporation, or to vote in person or by proxy at any meeting of stockholders. As used herein, the stock ledger of the Corporation shall refer to one (1) or more records administered by or on behalf of the Corporation in which the names of all of the Corporation's stockholders of record, the address and number of shares registered in the name of each such stockholder, and all issuances and transfer of stock of the Corporation are recorded in accordance with Section 224 of the DGCL.

Section 12. Conduct of Meetings. The Board of Directors of the Corporation may adopt by resolution such rules and regulations for the conduct of any meeting of the stockholders as it shall deem appropriate. Meetings of stockholders shall be presided over by the Chairman of the Board of Directors, if there shall be one, or shall there not be a Chairman of the Board of Directors, or in his or her absence, the President. The Board of Directors shall have the authority

to appoint a temporary chairman to serve at any meeting of the stockholders if the Chairman of the Board of Directors or the President is unable to do so for any reason. Except to the extent inconsistent with such rules and regulations as adopted by the Board of Directors, the chairman of any meeting of the stockholders shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the Board of Directors or prescribed by the chairman of the meeting, may include, without limitation, the following: (i) the establishment of an agenda or order of business for the meeting; (ii) the determination of when the polls shall open and close for any given matter to be voted on at the meeting; (iii) rules and procedures for maintaining order at the meeting and the safety of those present; (iv) limitations on attendance at or participation in the meeting to stockholders of record of the Corporation, their duly authorized and constituted proxies or such other persons as the chairman of the meeting shall determine; (v) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (vi) limitations on the time allotted to questions or comments by stockholders.

ARTICLE III **DIRECTORS**

Section 1. Number and Election of Directors. The Board of Directors shall consist of not less than one nor more than 15 (fifteen) members, each of whom shall be a natural person, the exact number of which shall initially be fixed by the Incorporator and thereafter from time to time by the Board of Directors. Candidates for the Board of Directors may be nominated at any meeting, regular or special, by or at the direction of the Board of Directors, or by any stockholder of the Corporation. Except as provided in Section 2 of this Article III, directors shall be elected by a plurality of the votes cast at the Annual Meetings of Stockholders and each director so elected shall hold office until the next Annual Meeting of Stockholders and until such director's successor is duly elected and qualified, or until such director's earlier death, resignation or removal. Any director may resign at any time upon written notice to the Corporation. Directors need not be stockholders of the Corporation.

Section 2. Vacancies. Unless otherwise required by law or the Certificate of Incorporation, vacancies on the Board of Directors or any committee thereof resulting from the death, resignation, removal, an increase in the number of directors or otherwise, may be filled only by a majority of the directors then in office, though less than a quorum, or by a sole remaining director, and the directors so chosen, in the case of the Board of Directors, shall hold office until the next annual election and until their successors are duly elected and qualified, or until their earlier death, resignation or removal and, in the case of any committee of the Board of Directors, shall hold office until their successors are duly appointed by the Board of Directors or until their earlier death, resignation or removal.

Section 3. Duties and Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors which may exercise all such powers of the Corporation except as may be otherwise prohibited by the DGCL, the Certificate of Incorporation or by these By-Laws.

Section 4. Meetings. The Board of Directors and any committee thereof may hold meetings, both regular and special, either within or without the State of Delaware. Regular meetings of the Board of Directors or any committee thereof may be held without notice at such time and at such place as may from time to time be determined by the Board of Directors or such committee thereof, respectively. Special meetings of the Board of Directors may be called by the

Chairman of the Board of Directors, if there be one, the President, or by any director. Special meetings of any committee of the Board of Directors may be called by the chairman of such committee, if there be one, the President, or any director serving on such committee. Notice of any special meeting stating the place, date and hour of the meeting shall be given to each director (or, in the case of a committee, to each member of such committee) not less than twenty-four (24) hours before the date of the meeting, by telephone or in the form of a writing or electronic transmission, or on such shorter notice as the person or persons calling such meeting may deem necessary or appropriate in the circumstances.

Section 5. Organization. At each meeting of the Board of Directors or any committee thereof, the Chairman of the Board of Directors or the chairman of such committee, as the case may be, or, in his or her absence or if there be none, a director chosen by a majority of the directors present, shall act as chairman of such meeting. Except as provided below, the Secretary of the Corporation shall act as secretary at each meeting of the Board of Directors and of each committee thereof. In case the Secretary shall be absent from any meeting of the Board of Directors or of any committee thereof, an Assistant Secretary shall perform the duties of secretary at such meeting; and in the absence from any such meeting of the Secretary and all the Assistant Secretaries, the chairman of the meeting may appoint any person to act as secretary of the meeting. Notwithstanding the foregoing, the members of each committee of the Board of Directors may appoint any person to act as secretary of any meeting of such committee and the Secretary or any Assistant Secretary of the Corporation may, but need not if such committee so elects, serve in such capacity.

Section 6. Resignations and Removals of Directors. Any director of the Corporation may resign from the Board of Directors or any committee thereof at any time, by giving notice in writing or by electronic transmission to the Chairman of the Board of Directors, if there be one, the President or the Secretary of the Corporation and, in the case of a committee, to the chairman of such committee, if there be one. Such resignation shall take effect when delivered or, if such resignation specifies a later effective time or an effective time, determined upon the happening of an event or events, in which case, such resignation takes effect upon such effective time. Unless otherwise specified in such resignation, the acceptance of such resignation shall not be necessary to make it effective. A resignation which is conditioned upon the director failing to receive a specified vote for reelection as a director may provide that it is irrevocable. Except as otherwise required by applicable law and subject to the rights, if any, of the holders of shares of preferred stock then outstanding, any director or the entire Board of Directors may be removed from office at any time, with or without cause, by the affirmative vote of the holders of at least a majority in voting power of the issued and outstanding capital stock of the Corporation entitled to vote in the election of directors. Any director serving on a committee of the Board of Directors may be removed from such committee at any time by the Board of Directors.

Section 7. Quorum. Except as otherwise required by law or the Certificate of Incorporation, at all meetings of the Board of Directors or any committee thereof, a majority of the entire Board of Directors or a majority of the directors constituting such committee, as the case may be, shall constitute a quorum for the transaction of business and the vote of a majority of the directors or committee members, as applicable, present at any meeting at which there is a quorum shall be the act of the Board of Directors or such committee, as applicable. If a quorum shall not be present at any meeting of the Board of Directors or any committee thereof, the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting of the time and place of the adjourned meeting, until a quorum shall be present.

Section 8. Actions by Written Consent. Unless otherwise provided in the Certificate of Incorporation, or these By-Laws, (a) any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all the members of the Board of Directors or such committee, as the case may be, consent thereto in writing or by electronic transmission and (b) a consent may be documented, signed and delivered in any manner permitted by Section 116 of the DGCL. Any person, whether or not then a director, may provide, through instruction to an agent or otherwise, that a consent to action will be effective at a future time (including a time determined upon the happening of an event) no later than sixty (60) days after such instruction is given or such provision is made and such consent shall be deemed to have been given at such effective time so long as such person is then a director and did not revoke the consent prior to such time. Any such consent shall be revocable prior to its becoming effective. After an action is taken, the consent or consents relating thereto shall be filed with the minutes of proceedings of the Board of Directors or committee thereof, in the same paper or electronic form as the minutes are maintained.

Section 9. Meetings by Means of Conference Telephone. Unless otherwise provided in the Certificate of Incorporation or these By-Laws, members of the Board of Directors of the Corporation, or any committee thereof, may participate in a meeting of the Board of Directors or such committee by means of a conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting pursuant to this Section 9 shall constitute presence in person at such meeting.

Section 10. Committees. The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the Corporation. Each member of a committee must meet the requirements for membership, if any, imposed by applicable law. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of any such committee. In the absence or disqualification of a member of a committee, and in the absence of a designation by the Board of Directors of an alternate member to replace the absent or disqualified member, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another qualified member of the Board of Directors to act at the meeting in the place of any absent or disqualified member. Any such committee, to the extent permitted by law and provided in the resolution establishing such committee, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it; provided, however, that no such committee shall have the power or authority to (i) approve, adopt, or recommend to the stockholders any action or matter (other than the election or removal of directors) expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopt, amend, or repeal any of these By-laws. Each committee shall keep regular minutes and report to the Board of Directors when required. Notwithstanding anything to the contrary contained in this Article III, the resolution of the Board of Directors establishing any committee of the Board of Directors and/or the charter of any such committee may establish requirements or procedures relating to the governance and/or operation of such committee that are different from, or in addition to, those set forth in these By-laws and, to the extent that there is any inconsistency between these By-laws and any such resolution or charter, the terms of such resolution or charter shall be controlling.

Section 11. Subcommittees. Unless otherwise provided in the Certificate of Incorporation, these By-laws, or the resolution of the Board of Directors designating a committee, such committee may create one or more subcommittees, each subcommittee to consist of one or more members of the committee, and delegate to a subcommittee any or all of the powers and authority of the committee. Except for references to committees and members of committees in Section 10 of this Article III, every reference in these By-laws to a committee of the Board of Directors or a member of a committee shall be deemed to include a reference to a subcommittee or member of a subcommittee.

Section 12. Compensation. If so determined by the Board of Directors, the directors may be paid their expenses, if any, of attendance at each meeting of the Board of Directors and may be paid a fixed sum for attendance at each meeting of the Board of Directors or a stated salary for service as director, payable in cash or securities. No such payment shall preclude any director from serving the Corporation in any other capacity and receiving compensation therefor. Members of special or standing committees may be allowed like compensation for service as committee members.

Section 13. Interested Directors. No contract or transaction between the Corporation and one or more of its directors or officers, or between the Corporation and any other corporation, partnership, association, or other organization in which one or more of its directors or officers are directors or officers or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the Board of Directors or committee thereof which authorizes the contract or transaction, or solely because any such director's or officer's vote is counted for such purpose if (i) the material facts as to the director's or officer's relationship or interest and as to the contract or transaction are disclosed or are known to the Board of Directors or the committee, and the Board of Directors or committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested directors, even though the disinterested directors be less than a quorum; or (ii) the material facts as to the director's or officer's relationship or interest and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the stockholders; or (iii) the contract or transaction is fair as to the Corporation as of the time it is authorized, approved or ratified by the Board of Directors, a committee thereof or the stockholders. Common or interested directors may be counted in determining the presence of a quorum at a meeting of the Board of Directors or of a committee which authorizes such contract or transaction.

ARTICLE IV **OFFICERS**

Section 1. General. The officers of the Corporation shall be chosen by the Board of Directors and shall be a President and a Secretary. The Board of Directors, in its discretion, also may choose a Chairman of the Board of Directors (who must be a director) and one or more Vice Presidents, a Treasurer, Assistant Secretaries, Assistant Treasurers and other officers. Any number of offices may be held by the same person, unless otherwise prohibited by law, the Certificate of Incorporation or these By-laws. The officers of the Corporation need not be stockholders of the Corporation nor, except in the case of the Chairman of the Board of Directors, need such officers be directors of the Corporation.

Section 2. Election. The Board of Directors, at its first meeting held after each Annual Meeting of Stockholders (or action by written consent of stockholders in lieu of the Annual Meeting of Stockholders), shall elect the officers of the Corporation who shall hold their offices for such terms and shall exercise such powers and perform such duties as shall be determined from time to time by the Board of Directors; and each officer of the Corporation shall hold office until such officer's successor is elected and qualified, or until such officer's earlier death, resignation or removal. Any officer elected by the Board of Directors may be removed at any time by the Board of Directors. Any vacancy occurring in any office of the Corporation shall be filled by the Board of Directors. The salaries of all officers of the Corporation shall be fixed by the Board of Directors.

Section 3. Voting Securities Owned by the Corporation. Powers of attorney, proxies, waivers of notice of meeting, consents and other instruments relating to securities owned by the Corporation may be executed in the name of and on behalf of the Corporation by the President or any Vice President or any other officer authorized to do so by the Board of Directors and any such officer may, in the name of and on behalf of the Corporation, take all such action as any such officer may deem advisable to vote in person or by proxy at any meeting of security holders of any corporation or other entity in which the Corporation may own securities and at any such meeting shall possess and may exercise any and all rights and power incident to the ownership of such securities and which, as the owner thereof, the Corporation might have exercised and possessed if present. The Board of Directors may, by resolution, from time to time confer like powers upon any other person or persons.

Section 4. Chairman of the Board of Directors. The Chairman of the Board of Directors, if there be one, shall preside at all meetings of the stockholders and of the Board of Directors. The Chairman of the Board of Directors, if there be one, shall be the Chief Executive Officer of the Corporation, unless the Board of Directors designates the President as the Chief Executive Officer, and, except where by law the signature of the President is required, the Chairman of the Board of Directors shall possess the same power as the President to sign all contracts, certificates and other instruments of the Corporation which may be authorized by the Board of Directors. During the absence or disability of the President, the Chairman of the Board of Directors shall exercise all the powers and discharge all the duties of the President. The Chairman of the Board of Directors shall also perform such other duties and may exercise such other powers as may from time to time be assigned by these By-Laws or by the Board of Directors.

Section 5. President. The President shall, subject to the oversight and control of the Board of Directors and, if there be one, the Chairman of the Board of Directors, have general supervision of the business of the Corporation and shall see that all orders and resolutions of the Board of Directors are carried into effect. The President shall execute all bonds, mortgages, contracts and other instruments of the Corporation requiring a seal, under the seal of the Corporation, except where required or permitted by law to be otherwise signed and executed and except that the other officers of the Corporation may sign and execute documents when so authorized by these By-Laws, the Board of Directors or the President. In the absence or disability of the Chairman of the Board of Directors, or if there be none, the President shall preside at all meetings of the stockholders and, if the President is also a director, the Board of Directors. If there be no Chairman of the Board of Directors, or if the Board of Directors shall otherwise designate, the President shall be the Chief Executive Officer of the Corporation. The President shall also perform such other duties and may exercise such other powers as may from time to time be assigned to such officer by these By-Laws or by the Board of Directors.

Section 6. Vice Presidents. At the request of the President or in the President's absence or in the event of the President's inability or refusal to act (and if there be no Chairman of the Board of Directors), the Vice President, or the Vice Presidents if there is more than one (in the order designated by the Board of Directors), shall perform the duties of the President, and when so acting, shall have all the powers of and be subject to all the restrictions upon the President. Each Vice President shall perform such other duties and have such other powers as the Board of Directors from time to time may prescribe. If there be no Chairman of the Board of Directors and no Vice President, the Board of Directors shall designate the officer of the Corporation who, in the absence of the President or in the event of the inability or refusal of the President to act, shall perform the duties of the President, and when so acting, shall have all the powers of and be subject to all the restrictions upon the President.

Section 7. Secretary. The Secretary shall attend all meetings of the Board of Directors and all meetings of stockholders and record all the proceedings thereat in a book or books to be kept for that purpose; the Secretary shall also perform like duties for committees of the Board of Directors when required. The Secretary shall give, or cause to be given, notice of all meetings of the stockholders and special meetings of the Board of Directors, and shall perform such other duties as may be prescribed by the Board of Directors, the Chairman of the Board of Directors or the President, under whose supervision the Secretary shall be. If the Secretary shall be unable or shall refuse to cause to be given notice of all meetings of the stockholders and special meetings of the Board of Directors, and if there be no Assistant Secretary, then either the Board of Directors or the President may choose another officer to cause such notice to be given. The Secretary shall have custody of the seal of the Corporation and the Secretary or any Assistant Secretary, if there be one, shall have authority to affix the same to any instrument requiring it and when so affixed, it may be attested by the signature of the Secretary or by the signature of any such Assistant Secretary. The Board of Directors may give general authority to any other officer to affix the seal of the Corporation and to attest to the affixing by such officer's signature. The Secretary shall see that all books, reports, statements, certificates and other documents and records required by law to be kept or filed are properly kept or filed, as the case may be.

Section 8. Treasurer. The Treasurer, if there be one, shall have the custody of the Corporation's funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the Corporation and shall deposit all moneys and other valuable effects in the name and to the credit of the Corporation in such depositories as may be designated by the Board of Directors. The Treasurer shall disburse the funds of the Corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements, and shall render to the President and the Board of Directors, at its regular meetings, or when the Board of Directors so requires, an account of all transactions as Treasurer and of the financial condition of the Corporation. If required by the Board of Directors, the Treasurer shall give the Corporation a bond in such sum and with such surety or sureties as shall be satisfactory to the Board of Directors for the faithful performance of the duties of the office of the Treasurer and for the restoration to the Corporation, in case of the Treasurer's death, resignation, retirement or removal from office, of all books, papers, vouchers, money and other property of whatever kind in the Treasurer's possession or under the Treasurer's control belonging to the Corporation.

Section 9. Assistant Secretaries. Assistant Secretaries, if there be any, shall perform such duties and have such powers as from time to time may be assigned to them by the Board of Directors, the President, any Vice President, if there be one, or the Secretary, and in the absence of the Secretary or in the event of the Secretary's inability or refusal to act, shall perform

the duties of the Secretary, and when so acting, shall have all the powers of and be subject to all the restrictions upon the Secretary.

Section 10. Assistant Treasurers. Assistant Treasurers, if there be any, shall perform such duties and have such powers as from time to time may be assigned to them by the Board of Directors, the President, any Vice President, if there be one, or the Treasurer, and in the absence of the Treasurer or in the event of the Treasurer's inability or refusal to act, shall perform the duties of the Treasurer, and when so acting, shall have all the powers of and be subject to all the restrictions upon the Treasurer. If required by the Board of Directors, an Assistant Treasurer shall give the Corporation a bond in such sum and with such surety or sureties as shall be satisfactory to the Board of Directors for the faithful performance of the duties of the office of Assistant Treasurer and for the restoration to the Corporation, in case of the Assistant Treasurer's death, resignation, retirement or removal from office, of all books, papers, vouchers, money and other property of whatever kind in the Assistant Treasurer's possession or under the Assistant Treasurer's control belonging to the Corporation.

Section 11. Other Officers. Such other officers as the Board of Directors may choose shall perform such duties and have such powers as from time to time may be assigned to them by the Board of Directors. The Board of Directors may delegate to any other officer of the Corporation the power to choose such other officers and to prescribe their respective duties and powers.

ARTICLE V

STOCK

Section 1. Form of Certificates. Every holder of stock in the Corporation shall be entitled to have a certificate signed by, or in the name of, the Corporation by any two authorized officers of the Corporation, certifying the number of shares owned by such stockholder in the Corporation. The Corporation shall not have power to issue a certificate in bearer form.

Section 2. Signatures. Any or all of the signatures on a certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue.

Section 3. Lost Certificates. The Board of Directors may direct a new certificate to be issued in place of any certificate theretofore issued by the Corporation alleged to have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed. When authorizing such issue of a new certificate, the Board of Directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed certificate, or such owner's legal representative, to advertise the same in such manner as the Board of Directors shall require and/or to give the Corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate or the issuance of such new certificate.

Section 4. Transfers. Stock of the Corporation shall be transferable in the manner prescribed by applicable law and in these By-Laws. Transfers of stock shall be made on the books of the Corporation only by the person named in the certificate or by such person's attorney lawfully constituted in writing and upon the surrender of the certificate therefor, properly endorsed

for transfer and payment of all necessary transfer taxes; provided, however, that such surrender and endorsement or payment of taxes shall not be required in any case in which the officers of the Corporation shall determine to waive such requirement. Every certificate exchanged, returned or surrendered to the Corporation shall be marked "Cancelled," with the date of cancellation, by the Secretary or Assistant Secretary of the Corporation or the transfer agent thereof. No transfer of stock shall be valid as against the Corporation for any purpose until it shall have been entered in the stock records of the Corporation by an entry showing from and to whom transferred.

Section 5. Dividend Record Date. In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than sixty (60) days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 6. Record Owners. The Corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and to hold liable for calls and assessments a person registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise required by law.

Section 7. Transfer and Registry Agents. The Corporation may from time to time maintain one or more transfer offices or agencies and registry offices or agencies at such place or places as may be determined from time to time by the Board of Directors.

ARTICLE VI **NOTICES**

Section 1. Notices. Whenever written notice is required by law, the Certificate of Incorporation or these By-Laws, to be given to any director, member of a committee or stockholder, such notice may be given in writing directed to such director's, committee member's or stockholder's mailing address (or by electronic transmission directed to such director's, committee member's or stockholder's electronic mail address, as applicable) as it appears on the records of the Corporation and shall be given: (a) if mailed, when the notice is deposited in the United States mail, postage prepaid, (b) if delivered by courier service, the earlier of when the notice is received or left at such director's, committee member's or stockholder's address or (c) if given by electronic mail, when directed to such director's, committee member's or stockholder's electronic mail address unless such director, committee member or stockholder has notified the corporation in writing or by electronic transmission of an objection to receiving notice by electronic mail or such notice is prohibited by the under applicable law, the Certificate of Incorporation or these By-laws. Without limiting the manner by which notice otherwise may be given effectively to stockholders, but subject to Section 232(e) of the DGCL, any notice to stockholders given by the Corporation under applicable law, the Certificate of Incorporation or these By-laws shall be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given. Any such consent shall be revocable by the stockholder by written notice or electronic transmission to the Corporation. The Corporation may give notice by electronic mail in accordance with the first sentence of this Section 1 without obtaining the consent required by the

second sentence of this Section 1. Notice given by electronic transmission, as described above, shall be deemed given: (i) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice; (ii) if by a posting on an electronic network, together with separate notice to the stockholder of such specific posting, upon the later of (A) such posting and (B) the giving of such separate notice; and (iii) if by any other form of electronic transmission, when directed to the stockholder. Notwithstanding the foregoing, a notice may not be given by an electronic transmission from and after the time that (i) the Corporation is unable to deliver by such electronic transmission two consecutive notices given by the Corporation and (ii) such inability becomes known to the Secretary or an Assistant Secretary of the Corporation or to the transfer agent, or other person responsible for the giving of notice, provided, however, the inadvertent failure to discover such inability shall not invalidate any meeting or other action.

Section 2. Waivers of Notice. Whenever any notice is required by law, the Certificate of Incorporation or these By-Laws, to be given to any director, member of a committee or stockholder, a waiver thereof in writing, signed, by the person or persons entitled to notice, or a waiver by electronic transmission by the person or persons entitled to notice, whether before or after the time stated therein, shall be deemed equivalent thereto. Attendance of a person at a meeting, present in person or represented by proxy, shall constitute a waiver of notice of such meeting, except where the person attends the meeting for the express purpose of objecting at the beginning of the meeting to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any Annual or Special Meeting of Stockholders or any regular or special meeting of the directors or members of a committee of directors need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by law, the Certificate of Incorporation or these By-laws.

ARTICLE VII

GENERAL PROVISIONS

Section 1. Dividends. Dividends upon the capital stock of the Corporation, subject to the requirements of the DGCL and the provisions of the Certificate of Incorporation, if any, may be declared by the Board of Directors at any regular or special meeting of the Board of Directors (or any action by written consent in lieu thereof in accordance with Section 8 of Article III hereof), and may be paid in cash, in property, or in shares of the Corporation's capital stock. Before payment of any dividend, there may be set aside out of any funds of the Corporation available for dividends such sum or sums as the Board of Directors from time to time, in its absolute discretion, deems proper as a reserve or reserves to meet contingencies, or for purchasing any of the shares of capital stock, warrants, rights, options, bonds, debentures, notes, scrip or other securities or evidences of indebtedness of the Corporation, or for equalizing dividends, or for repairing or maintaining any property of the Corporation, or for any proper purpose, and the Board of Directors may modify or abolish any such reserve.

Section 2. Disbursements. All checks or demands for money and notes of the Corporation shall be signed by such officer or officers or such other person or persons as the Board of Directors may from time to time designate.

Section 3. Fiscal Year. The fiscal year of the Corporation shall be fixed by resolution of the Board of Directors.

Section 4. Corporate Seal. The Corporation may have a corporate seal. Any such seal shall have inscribed thereon the name of the Corporation, the year of its organization and the

words "Corporate Seal, Delaware". Such seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

ARTICLE VIII

INDEMNIFICATION

Section 1. Right to Indemnification. Each person who was or is made a party or is threatened to be made a party to or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (hereinafter a "proceeding"), by reason of the fact that he or she is or was a director or officer of the Corporation or is or was a director or officer of the Corporation serving at the request of the Corporation as a director, officer, trustee, committee member, employee or agent of another corporation (hereinafter an "indemnatee"), shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than such law permitted the Corporation to provide prior to such amendment) against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by such indemnatee in connection therewith; provided, however, that, except as provided in Section 3 of this Article VIII of these By-Laws with respect to proceedings to enforce rights to indemnification, the Corporation shall indemnify any such indemnatee in connection with a proceeding (or part thereof) initiated by such indemnatee only if such proceeding (or part thereof) was authorized by the Board of Directors of the Corporation.

Section 2. Advancement of Expenses. Expenses (including attorney's fees) incurred by an indemnatee of the Corporation in defending any proceeding shall be paid by the Corporation in advance of its final disposition (hereinafter an "advancement of expenses"); provided, however, that an advancement of expenses shall be made only upon delivery to the Corporation of an undertaking (hereinafter an "undertaking"), by or on behalf of such indemnatee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal (hereinafter a "final adjudication") that such indemnatee is not entitled to indemnification or advancement of expenses by the Corporation as authorized in this Article VIII of these By-Laws or otherwise.

Notwithstanding the foregoing or any other provision of these By-Laws, no advance shall be made by the Corporation to any person (i) if a determination is reasonably and promptly made by the Board of Directors by a majority vote of those directors who have not been named parties to the action, even though less than a quorum, or if there are no such directors or if such directors so direct, by independent legal counsel, that, based upon the facts known by the Board of Directors or such counsel at the time such determination is made: (x) the person seeking advancement of expenses (1) acted in bad faith, (2) did not act in a manner that he or she reasonably believed to be in or not opposed to the best interests of the Corporation; or (3) acted contrary to, or omitted to act in accordance with, written policies of the Corporation applicable to such person; (y) with respect to any criminal proceeding, such person believed or had reason to believe that his or her conduct was unlawful; or (z) such person deliberately breached his or her duty to the Corporation, and (ii) unless an undertaking by or on behalf of such person has been delivered to the Corporation and such person has provided such security or satisfied such conditions as may be imposed by the Board of Directors at the time of such delivery.

The rights to indemnification and to the advancement of expenses conferred in Sections 1 and 2 of this Article VIII of these By-Laws shall be contract rights and such rights shall, unless otherwise provided when authorized or ratified, continue as to an indemnitee who has ceased to be a director or officer of the Corporation and shall inure to the benefit of the indemnitee's heirs, executors and administrators.

Notwithstanding anything contained in this Article VIII to the contrary, except for proceedings to enforce rights to indemnification or advancement of expenses (which shall be governed by Section 3 of this Article VIII), the Corporation shall not be obligated to indemnify any indemnitee (or his or her heirs, executors or administrators) or advance expenses in connection with a proceeding (or part thereof) initiated by such indemnitee unless such proceeding (or part thereof) was authorized or consented to by the Board of Directors of the Corporation.

Section 3. Claims. If a claim for indemnification or advancement of expenses under this Article VIII of these By-Laws is not paid in full within sixty (60) days after a written claim therefor by an indemnitee has been received by the Corporation, the indemnitee may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such action, the Corporation shall have the burden of proving that the indemnitee is not entitled to the requested indemnification or advancement of expenses under the DGCL.

Section 4. Non-Exclusivity of Rights. The rights to indemnification and to the advancement of expenses conferred in this Article VIII of these By-Laws shall not be exclusive of any other right which any person may have or hereafter acquire under any statute, the Certificate of Incorporation, By-Laws, agreement, vote of stockholders or disinterested Directors or otherwise.

Section 5. Insurance. The Corporation may maintain insurance, at its expense, to protect itself and any director, officer, trustee, committee member, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the DGCL.

Section 6. Indemnification of Trustees, Committee Members, Employees and Agents. The Corporation may, to the extent authorized from time to time by the Board of Directors of the Corporation, grant rights to indemnification and to the advancement of expenses to any trustee, committee member, employee or agent of the Corporation to the same extent as those conferred in this Article VIII of these By-Laws to directors and officers of the Corporation.

ARTICLE IX **AMENDMENTS**

Section 1. Amendments. These By-Laws may be altered, amended or repealed, in whole or in part, or new By-Laws may be adopted by the stockholders or by the Board of Directors, provided, however, that notice of such alteration, amendment, repeal or adoption of new By-Laws be contained in the notice of such meeting of stockholders or Board of Directors as the case may be, called for the purpose of acting upon any proposed alteration, amendment, repeal or adoption of new By-laws. All such alterations, amendments, repeals or adoptions of new By-laws must be approved by either the holders of a majority of the outstanding capital stock

entitled to vote thereon or by a majority of the entire Board of Directors then in office. Any amendment to these By-laws adopted by stockholders which specifies the votes that shall be necessary for the election of directors shall not be further amended or repealed by the Board of Directors.

Section 2. Entire Board of Directors. As used in this Article IX and in these By-Laws generally, the term "entire Board of Directors" means the total number of directors which the Corporation would have if there were no vacancies.