ASSISTANT SECRETARY CERTIFICATE

I, Michelle L. Bratzke, do hereby certify that:

1. I am a duly appointed and qualified Assistant Secretary of AbbVie Bioresearch Center Inc. and acting as such; that AbbVie Bioresearch Center Inc. is a corporation organized and existing under the laws of the State of Delaware with its principal office at 1 N. Waukegan Road, North Chicago, Illinois, USA and its registered address at 1521 Concord Pike Suite 201, Wilmington, DE 19803, New Castle County, USA;

2. I am a keeper of its books and records and its corporate seal; and

3. Attached as Exhibit A hereto is a true, complete, and current copy of the Second Amended and Restated By-laws for AbbVie Bioresearch Center Inc.;

IN WITNESS WHEROF, I have subscribed my name as Assistant Secretary and have caused the corporate seal of AbbVie Bioresearch Center Inc. to be hereunto affixed this 5 day of September 2025.

Michelle L. Bratzke
Assistant Secretary

Exhibit A

SECOND AMENDED AND RESTATED

BY-LAWS

OF

ABBVIE BIORESEARCH CENTER INC.

(hereinafter called the "Corporation")

Adopted by the Board of Directors
of the Corporation on June 19, 2006
as amended and restated, effective July 1, 2006
as amended and restated, effective November 1, 2012

ARTICLE I

OFFICES

Section 1. Registered Office. The registered office of the Corporation shall be in the City of Wilmington, County of New Castle, State of Delaware.

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.

Section 2. Annual Meetings. The Annual Meetings of Stockholders shall be held each year for the election of directors and for the transaction of any other proper business as directed by the current Board of Directors.

Section 3. Special Meetings. Unless otherwise required by law or by the restated certificate of incorporation of the Corporation, as amended 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, 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 or (ii) stockholders owning a majority of the capital stock of the Corporation issued and outstanding and entitled to vote. 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 written notice of the meeting shall be given which shall state the place, date and hour of the 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 written notice of any meeting shall be given not less than ten nor more than sixty days before the date of the meeting to each stockholder entitled to vote at such meeting.

Section 5. Adjournments. Any meeting of the stockholders may be adjourned from time to time to reconvene at the same or some other place, and notice need not be given of any such adjourned meeting if the time and place thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the Corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than thirty days, or if after the adjournment a new record date is fixed for the adjourned meeting, notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

Section 6. Quorum. Unless otherwise required by law or the Certificate of Incorporation, the holders of a majority of the 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 capital stock represented and entitled to vote thereat, 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 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 in writing, 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 by delivery to its registered office in the State of Delaware, its principal place of business, or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to the Corporation's registered office shall be by hand or by certified or registered mail, return receipt requested. Every written consent shall bear the date of signature of each stockholder who signs the consent and no written consent shall be effective to take the corporate action referred to therein unless, within sixty days of the earliest dated consent delivered in the manner required by this Section 8 to the Corporation, written consents signed by a sufficient number of holders to take action are delivered to the Corporation by delivery to its registered office in the state of Delaware, its principal place of business, or an officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing 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 such meeting had been the date that written consents signed by a sufficient number of holders to take the action were delivered to the Corporation as provided above in this section.

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, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten days prior to the meeting either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be

produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder of the Corporation who is present.

Section 10. 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.

Section 11. Conduct of Meetings. The Board of Directors of the Corporation may adopt by resolution such rules and regulations for the conduct of the meeting of the stockholders as it shall deem appropriate. 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 participants.

ARTICLE III

DIRECTORS

Section 1. Number and Election of Directors. The Board of Directors shall consist of one member. The number of members on the Board Directors may be changed from time to time by action of the stockholders or by action of the Board of Directors. 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.

Section 2. Vacancies. Unless otherwise required by law or the Certificate of Incorporation, vacancies arising through death, resignation, removal, an increase in the number of directors or otherwise may be filled by a majority of the

directors then in office, though less than a quorum, or by a sole remaining director, or by a majority of the stockholders if no directors remain in office, and the directors so chosen 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.

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 and do all such lawful acts and things as are not by statute or by the Certificate of Incorporation or by these By-Laws required to be exercised or done by the stockholders.

Section 4. Meetings. The Board of Directors may hold meetings, both regular and special, either within or without the State of Delaware. Regular meetings of the Board of Directors 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. Special meetings of the Board of Directors may be called by the Chairman, if there be one, the President, or by any director. Notice thereof stating the place, date and hour of the meeting shall be given to each director either by mail not less than forty-eight (48) hours before the date of the meeting, by telephone or telegram on twenty-four (24) hours' notice, or on such shorter notice as the person or persons calling such meeting may deem necessary or appropriate in the circumstances.

Section 5. Quorum. Except as otherwise required by law or the Certificate of Incorporation, at all meetings of the Board of Directors, a majority of the entire Board of Directors shall constitute a quorum for the transaction of business and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the Board of Directors. If a quorum shall not be present at any meeting of the Board of Directors, 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 6. Actions by Written Consent. Unless otherwise provided in the Certificate of Incorporation, or these By-Laws, 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 committee, as the case may be, consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the Board of Directors or committee.

Section 7. Meetings by Means of Conference Telephone. Unless otherwise provided in the Certificate of Incorporation, 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 similar 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 7 shall constitute presence in person at such meeting.

Section 8. 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. 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 member of the Board of Directors to act at the meeting in the place of any absent or disqualified member. Any 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. Each committee shall keep regular minutes and report to the Board of Directors when required.

Section 9. Compensation. 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 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 attending committee meetings.

Section 10. 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 the director or officer's vote is counted for such purpose if (i) the material facts as to the director 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 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 the 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 or the Certificate of Incorporation. 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 all officers of the Corporation shall hold office until their successors are chosen and qualified, or until their earlier death, resignation or removal. Any officer elected by the Board of Directors may be removed at any time by the affirmative vote of 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 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 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 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 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 corporate 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 disability 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 disability 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, in the name of the Corporation (i) by the Chairman of the Board of Directors, the President or a Vice President and (ii) by the Treasurer or an Assistant Treasurer, or the Secretary or an Assistant Secretary of the Corporation, certifying the number of shares owned by such stockholder in the Corporation.

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 the 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 with respect to the certificate alleged to have been lost, stolen or destroyed or the issuance of such new certificate.

Section 4. Transfers. Stock of the Corporation shall be transferable in the manner prescribed by 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, which shall be cancelled before a new certificate shall be issued. 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. Record Date.

(a) In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of 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 nor less than ten days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of 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 stockholders shall apply to any adjournment of the meeting; providing, however, that the Board of Directors may fix a new record date for the adjourned meeting.

(b) In order that the Corporation may determine the stockholders entitled to consent to corporate action in writing 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 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 in writing without a meeting, when no prior action by the Board of Directors is required by law, shall be the first date on

which a signed written consent setting forth the action taken or proposed to be taken is delivered to the Corporation by delivery to its registered office in this State, its principal place of business, or an officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a corporation's registered office shall be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the Board of Directors and prior action by the Board of Directors is required by 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 resolutions taking such prior action.

(c) 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 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.

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 by mail, addressed to such director, member of a committee or stockholder, at such person's address as it appears on the records of the Corporation, with postage thereon prepaid, and such notice shall be deemed to be given at the time when the same shall be deposited in the United States mail. Written notice may also be given personally or by telegram, telex or cable.

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 said 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.

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 6 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 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 begin on the first day of January in each year and end on the last day of December in each year.

Section 4. Corporate Seal. The corporate seal shall have inscribed thereon the name of the Corporation, the year of its organization and the words "Corporate Seal, Delaware". The 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. Power to Indemnify in Actions, Suits or Proceedings other than Those by or in the Right of the Corporation. Subject to Section 3 of this Article VIII, the Corporation shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation) by reason of the fact that such person 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 or officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which such person reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that such person's conduct was unlawful.

Section 2. Power to Indemnify in Actions, Suits or Proceedings by or in the Right of the Corporation. Subject to Section 3 of this Article VIII, the Corporation shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that such person 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, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation; except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 3. Authorization of Indemnification. Any indemnification under this Article VIII (unless ordered by a court) shall be made by the Corporation

only as authorized in the specific case upon a determination that indemnification of the director or officer is proper in the circumstances because such person has met the applicable standard of conduct set forth in Section 1 or Section 2 of this Article VIII, as the case may be. Such determination shall be made (i) by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or (ii) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion or (iii) by the stockholders. To the extent, however, that a director or officer of the Corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding described above, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith, without the necessity of authorization in the specific case.

Section 4. Good Faith Defined. For purposes of any determination under Section 3 of this Article VIII, a person shall be deemed to have acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation, or, with respect to any criminal action or proceeding, to have had no reasonable cause to believe such person's conduct was unlawful, if such person's action is based on the records or books of account of the Corporation or another enterprise, or on information supplied to such person by the officers of the Corporation or another enterprise in the course of their duties, or on the advice of legal counsel for the Corporation or another enterprise or on information or records given or reports made to the Corporation or another enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Corporation or another enterprise. The term "another enterprise" as used in this Section 4 shall mean any other corporation or any partnership, joint venture, trust, employee benefit plan or other enterprise of which such person is or was serving at the request of the Corporation as a director, officer, employee or agent. The provisions of this Section 4 shall not be deemed to be exclusive or to limit in any way the circumstances in which a person may be deemed to have met the applicable standard of conduct set forth in Section 1 or 2 of this Article VIII, as the case may be.

Section 5. Indemnification by a Court. Notwithstanding any contrary determination in the specific case under Section 3 of this Article VIII, and notwithstanding the absence of any determination thereunder, any director or officer may apply to the Court of Chancery in the State of Delaware for indemnification to the extent otherwise permissible under Sections 1 and 2 of this Article VIII. The basis of such indemnification by a court shall be a determination by such court that indemnification of the director or officer is proper in the circumstances because such person has met the applicable standards of conduct set forth in Section 1 or 2 of this Article VIII, as the case may be. Neither a contrary determination in the specific case under Section 3 of this Article VIII nor the absence of any determination thereunder shall be a defense to such application or create a presumption that the director or officer seeking indemnification has not met any applicable standard of conduct.

Notice of any application for indemnification pursuant to this Section 5 shall be given to the Corporation promptly upon the filing of such application. If successful, in whole or in part, the director or officer seeking indemnification shall also be entitled to be paid the expense of prosecuting such application.

Section 6. Expenses Payable in Advance. Expenses incurred by a director or officer in defending any civil, criminal, administrative or investigative action, suit or proceeding shall be paid by the Corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the Corporation as authorized in this Article VIII.

Section 7. Nonexclusivity of Indemnification and Advancement of Expenses. The indemnification and advancement of expenses provided by or granted pursuant to this Article VIII shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under the Certificate of Incorporation, any By-Law, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office, it being the policy of the Corporation that indemnification of the persons specified in Sections 1 and 2 of this Article VIII shall be made to the fullest extent permitted by law. The provisions of this Article VIII shall not be deemed to preclude the indemnification of any person who is not specified in Section 1 or 2 of this Article VIII but whom the Corporation has the power or obligation to indemnify under the provisions of the General Corporation Law of the State of Delaware, or otherwise.

Section 8. Insurance. The Corporation may purchase and maintain insurance on behalf of any person who 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, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the Corporation would have the power or the obligation to indemnify such person against such liability under the provisions of this Article VIII.

Section 9. Certain Definitions. For purposes of this Article VIII, references to "the Corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors or officers, so that any person who is or was a director or officer of such constituent corporation, or is or was a director or officer of such constituent corporation serving at the request of such constituent

corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, shall stand in the same position under the provisions of this Article VIII with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued. For purposes of this Article VIII, references to "fines" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "serving at the request of the Corporation" shall include any service as a director, officer, employee or agent of the Corporation which imposes duties on, or involves services by, such director or officer with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the Corporation" as referred to in this Article VIII.

Section 10. Survival of Indemnification and Advancement of Expenses. The indemnification and advancement of expenses provided by, or granted pursuant to, this Article VIII shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director or officer and shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 11. Limitation on Indemnification. Notwithstanding anything contained in this Article VIII to the contrary, except for proceedings to enforce rights to indemnification (which shall be governed by Section 5 hereof), the Corporation shall not be obligated to indemnify any director or officer in connection with a proceeding (or part thereof) initiated by such person unless such proceeding (or part thereof) was authorized or consented to by the Board of Directors of the Corporation.

Section 12. Indemnification of Employees and Agents. The Corporation may, to the extent authorized from time to time by the Board of Directors, provide rights to indemnification and to the advancement of expenses to employees and agents of the Corporation similar to those conferred in this Article VIII 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. All such amendments 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.

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.