U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

CERTIFICATE OF WAIVER

ISSUED TO

Xcel Energy Responsible Person: Thomas Stegge Waiver Number: 107W-2024-00268

ADDRESS -

13620 Fenway Blvd N Hugo, MN 55038

This certificate is issued for the operations specifically described hereinafter. No person shall conduct any operation pursuant to the authority of this certificate except in accordance with the provisions contained in this certificate.

OPERATIONS AUTHORIZED

Operating Limitations for Small Unmanned Aircraft — Visibility; Operating Limitations for Small Unmanned Aircraft — Cloud Clearance.

LIST OF WAIVED REGULATIONS BY SECTION AND TITLE

14 CFR §§ 107.51(c)—Operating limitations for small unmanned aircraft - Visibility, and 107.51(d)—Operating limitations for small unmanned aircraft - Cloud Clearance

STANDARD PROVISIONS

- 1. A copy of the application made for this certificate shall be attached to and become a part hereof.
- 2. This certificate shall be presented for inspection upon the request of any authorized representative of the Administrator of the Federal Aviation Administration, or of any State or municipal official charged with the duty of enforcing local laws or regulations.
- 3. The holder of this certificate shall be responsible for the strict observance of the terms and provisions contained herein.

4. This certificate is nontransferable.

NOTE—This certificate constitutes a waiver of those Federal rules or regulations specifically referred to above. It does not constitute a waiver of any State law or local ordinance.

SPECIAL PROVISIONS

Special Provisions Nos. 1 to 18, inclusive, are set forth on the attached pages.

This Certificate of Waiver is effective from March 25, 2024, to March 31, 2028, and is subject to cancellation at any time upon notice by the Administrator or an authorized representative.

BY DIRECTION OF THE ADMINISTRATOR

Emerging Technologies Division, AFS-700

SPECIAL PROVISIONS ISSUED TO Xcel Energy

General.

The FAA's Flight Standards Service has reviewed your application to ensure compliance with the requirements of 14 CFR § 107.200 and § 107.205. Pursuant to these authorities, the Administrator finds that the proposed small unmanned aircraft (sUA) operation can be conducted safely under the provisions of this Certificate of Waiver (Waiver) as listed below because you have established adequate mitigations for risks involved with operating your sUA in the manner you described. Adherence to the provisions of this Waiver establishes the required level of safety within the national airspace system.

The Administrator may cancel this Waiver at any time. As a general rule, this Waiver may be canceled when it is no longer required, there is an abuse of its provisions, or when unforeseen safety factors develop. Failure to comply with any provision listed below is a violation of the terms of this Waiver and will serve as justification for cancellation.

List of Regulations Waived by Section and Title. The following regulations are waived:

14 CFR § 107.51(c), Operating limitations for small unmanned aircraft - Visibility, is waived to allow operations when the flight visibility as observed from the location of the control station is less than 3 statute miles;

14 CFR § 107.51(d), Operating limitations for small unmanned aircraft - Cloud Clearance, is waived to allow sUA operations not meeting the cloud clearance requirements of § 107.51(d).

No part of this waiver will function as an airspace authorization under 14 CFR § 107.41. The FAA's Air Traffic Organization responds directly to requests for such authorizations. The FAA LAANC system cannot be used for waivered operations.

Common Special Provisions. The Responsible Person is directly responsible for safety of operations conducted under this Waiver and will ensure the Remote Pilot in Command (remote PIC), manipulator of the controls, and visual observer(s) (VO)¹ comply with all provisions of this Waiver.

- 1. The Responsible Person listed on the Waiver is responsible to the FAA for the safe conduct of the operations. Prior to conducting operations that are the subject of this Waiver, the Responsible Person:
 - a. Must ensure the remote PIC, manipulators of the controls, and VO(s) are informed of the terms and provisions of this Waiver and strictly observe the terms and provisions herein;
 - b. Must ensure the remote PIC, manipulators of the controls, and VO(s) are informed and familiar with part 107 regulations; and
 - c. Evidence of the above (a and b) must be documented and must be presented for inspection upon request from the Administrator or an authorized representative;
- 2. This Waiver may be combined with Waiver No. **107W-2023-00478** as amended. This waiver may not be combined with any other waiver(s), authorizations(s) without specific authorization from the FAA;

¹ Title 14 CFR § 107.3 defines the term "visual observer." Any VO participating in operations conducted under this Waiver must meet the requirements listed in § 107.33 throughout the duration of flight operations.

- 3. The FAA has the authority to cancel or delay any or all flight operations if the safety of persons or property on the ground or in the air are in jeopardy or there is a violation of the terms of this Waiver;
- 4. A copy of this Waiver must be accessible and available to the remote PIC at the ground control station during sUA operations that are the subject of this Waiver;
- 5. The Responsible Person listed on this Waiver must maintain a current list of pilots by name and remote pilot certificate number used in operations under this Waiver. This list must be presented for inspection upon request from the Administrator or an authorized representative;
- 6. The Responsible Person listed on this Waiver must maintain a current list of sUA by registration number(s) used in operations under this Waiver. This list must be presented for inspection upon request from the Administrator or an authorized representative;
- 7. For the purposes of this Waiver, direct participants are the remote PICs, persons manipulating the controls, VOs, and any persons whose involvement is necessary for safety of the sUA operation. All other persons are considered non-participants;

Operating limitations for small unmanned aircraft - Weather: Visibility and Cloud Minimums Special Provisions sUAS operations may be conducted in weather conditions with reduced visibility and cloud clearance minimums, provided

- 8. Operations may not be conducted at night or during civil twilight, as defined in 14 CFR § 1.1 and § 107.29(c);
- 9. Unless Operations are combined with Waiver 107W-2023-00478 as amended, the remote PIC will ensure the altitude of the sUA is no higher than 400 feet above ground level, unless the sUA is flown within a 400-foot radius of a structure, and does not fly higher than 200 feet above that structure's immediate uppermost limit. The remote PIC will ensure the sUA remains in Class G airspace unless specific airspace authorization or waiver is received from the FAA in accordance with § 107.41;
- 10. During operations conducted under this Waiver the remote PIC will not fly the sUA unless the minimum flight visibility, as observed from the location of the control station is no less than 1 statute mile. At no time will the sUA be operated in an area where minimum flight visibility is less than 1 statute mile;
- 11. The sUA may not be operated into clouds;
- 12. The sUA must be equipped with high visibility markings and/or anti-collision lighting to increase the conspicuity of the sUA to 1 statute mile for daytime operations;
- 13. As described in the waiver application, the sUA must be operated within 1000 feet of the remote PIC;
- 14. As described in the waiver application, when operating within 3 statute miles of any airport or heliport, airport management must be notified prior to the sUAS operation, a method of radio or telephone communication with airport management must be established, and the remote PIC or VO must monitor the airport's common traffic advisory frequency;
- 15. The sUAS ground control station must display in real-time the sUA altitude, position, direction of flight, and sUA flight mode, and be configured to audibly or visually alert the remote PIC of degraded system performance and loss of Control link with the sUA. This information must be available at all times to the remote PIC;

- 16. ADS-B out (1090/978 MHz) may not be transmitted from the sUAS when operating pursuant to this Waiver. ADS-B in is required for all operations pursuant to this Waiver;
- 17. All emitters used in sUAS must be in compliance with all applicable FCC regulations and all provisions of the FCC authorization granted for the emitter. A FCC experimental authorization may not be used for sUAS operations under this Waiver;

ENVIRONMENTAL PROVISIONS

18. Operations conducted under this Waiver are limited to the location(s) meeting the performance requirements described in the Operational Details Section of the CONOPs document Version 1.0 dated January 30, 2024 submitted in support of the Waiver application.