

U.S. Department of Energy Office of Manufacturing and Energy Supply Chains
Guidance on Implementing Section 1006 of the Energy Act of 2020
October 2023

General Announcement

This guidance document supersedes the issuances of December 2022, May 2023, and the two September 2023 issuances.

In accordance with section 1006 of the Energy Act of 2020 (42 U.S.C. 6317 note; Pub. L. 116-260, div. Z) and section 40555 of the Infrastructure Investment and Jobs Act (Pub. L. No. 117-58), DOE is issuing this implementation guidance to establish a rebate program to encourage the replacement of energy inefficient transformers with transformers that meet or exceed the applicable energy conservation standards in 10 C.F.R. 431, subpart K. This document provides guidance on implementing the rebate program as it pertains to definitions, eligibility criteria, the eligibility window, rebate payment calculations, and application content requirements and process. The guidance also reflects Executive Order 14008, which supports a government effort to deliver at least 40 percent of the overall benefits from certain federal investments to disadvantaged communities. DOE published draft implementation guidance on April 27, 2022, for stakeholder input and feedback (87 FR 25006). DOE has made updates to the implementing guidance in accordance with the feedback received.

I. Purpose and Scope

- (a) This guidance describes the application process and the information necessary for the Secretary of Energy to make rebate payments to qualified entities as defined in section 1006 of the Energy Act of 2020, Pub. L. No. 116-260, div. Z (42 U.S.C. 6317 note), as amended (section 1006).
- (b) The Secretary may make rebate payments to qualified entities, subject to the availability of appropriations, for purchases of qualified energy efficient transformers that replace qualified energy inefficient transformers during the eligibility window, to the qualified entity. Rebate payments may only be made upon receipt by the Secretary of a rebate payment application that demonstrates that the applicant is eligible to receive such rebate payment and satisfied the other requirements as deemed necessary.
- (c) This guidance may be revised in a future document.

II. Authority

Section 1006 directs DOE to establish a transformer rebate program to make rebate payments to qualified entities for the replacement of qualified inefficient distribution transformers. Section 1006 also sets forth certain definitions, eligibility requirements, and authorized amounts of rebates. DOE will determine the extent to which appropriated funds are available to be obligated under this program.

III. Definitions

C.F.R. means the Code of Federal Regulations; *X C.F.R. Y* means Section Y of Title X of the Code of Federal Regulations.

Core Loss means the no-load loss of a given transformer as measured according to 10 C.F.R. 431, section 4.4 of Appendix A to Subpart K.

DOE means the U.S. Department of Energy.

Manufacturer means any entity that manufactures a transformer.

Rebate Payment means the payment which a qualified entity may receive upon successfully proving eligibility.

Rebate Payment Application means an application for a rebate payment that is submitted before the program deadline.

Secretary means the Secretary of the U.S. Department of Energy or such officers or employees of the U.S. Department of Energy as designated by the Secretary of the U.S. Department of Energy.

IV. Who May Apply?

(a) Qualified Entities

Qualified entities include owners of industrial or manufacturing facilities, commercial buildings, or multifamily residential buildings; a utility; or an energy service company that has replaced a qualified energy inefficient transformer with a qualified energy efficient transformer in the United States or its territories and fulfills the technical requirements of the rebate program.

(b) Preferences

- (1) Consistent with Executive Order 14008, applicants that are replacing a qualified energy inefficient transformer in a disadvantaged community will be given preference, subject to the availability of appropriated funds.
- (2) Applicants that are replacing a qualified energy inefficient transformer to contribute to or support grid reliability and resiliency are highly encouraged.
- (3) Applications including qualified energy efficient transformers that exceed current energy conservation standards are highly encouraged.
- (4) The Buy American requirements defined in Section 1605 of the American Recovery and Reinvestment Act do not apply to this program.

V. What is a Qualified Transformer?

(a) Qualified Energy Efficient Transformer

A qualified energy efficient transformer is a transformer—

- (1) meeting the definition of a distribution transformer according to 10 C.F.R. 431.192; and
- (2) meeting or exceeding the applicable energy conservation standards described in the tables contained in 10 C.F.R. 431.196(b)(2) or 10 C.F.R. 431.196(c)(1–2), as in effect on December 27, 2020.

(b) Qualified Energy Inefficient Transformer

A qualified energy inefficient transformer is a transformer—

- (1) meeting the definition of a distribution transformer according to 10 C.F.R. 431.192;
- (2) with an equal number of phases and capacity to any transformer described in the tables contained in 10 C.F.R. 431.196(b)(2) and 10 C.F.R. 431.196(c)(1–2), as in effect on December 27, 2020;
- (3) that does not meet or exceed the applicable energy standards of a qualified energy efficient transformer; and
- (4) was manufactured between:
 - (i) January 1, 1987, and December 31, 2008, if it is a liquid-immersed distribution transformer, as described in 10 C.F.R. 431.196(b)(2), as in effect on December 27, 2020; or
 - (ii) January 1, 1992, and December 31, 2011, if it is a medium-voltage dry-type distribution transformer, as described in 10 C.F.R. 431.196(c)(1–2), as in effect on December 27, 2020.

VI. Eligibility Window

(a) Replacement Window

Qualified transformer replacements may have taken place or are scheduled to take place—

- (1) prior to the passage of the Energy Act of 2020;
- (2) after the passage of the Energy Act of 2020 until the application deadline; or
- (3) after the application deadline, if the application contains a valid purchase order and the recipient scraps the qualified inefficient transformer within 2 years, subject to inspection by DOE officials.

(b) Application Deadline

All applications for rebates must be received by end-of-day December 8, 2023, to be considered, which ensures rebate processing is completed before the expiration of the program authority.

VII. Application Requirements

(a) General Provisions

Documentation will be reviewed in accordance with the technical requirements to ensure eligibility and minimize fraud, waste, and abuse. Additional documentation may be required in the online submission portal or must be available upon request to clarify eligibility. DOE may release data contained in the application to third parties to inform the analysis.

(b) Required Documentation

Entities must submit the documentation in paragraphs (1–5) as part of their application.

(1) Entity Information

Applicants must provide:

- (i) the name and physical address of the entity applying for the rebate payment;
- (ii) the account number and routing number for the bank account to which a rebate would be deposited;
- (iii) the name, mailing address, telephone number, and email address of a point of contact to respond to questions, requests for additional information, and receive notification of eligibility determination; and
- (iv) a description of the type of entity (e.g., utility).

(2) Qualified Energy Efficient Transformer

Applicants must provide evidence supporting the eligibility of the energy efficient transformer, as defined in section V(a), and its core loss, including:

- (i) the purchase date and a copy of the invoice or proof of payment;
- (ii) the zip code where the qualified energy efficient transformer is installed;
- (iii) the technical specifications of the transformer, including:
 - (A) the serial number;
 - (B) year of manufacture;
 - (C) capacity rating in kilovolt-amperes (kVA);
 - (D) number of phases;
 - (E) basic impulse level (BIL) rating (for dry-type transformers); and
 - (F) certification of DOE compliance showing the basic and individual model number corresponding to the DOE certification;
- (iv) a copy or image of the nameplate;
- (v) a statement or receipt from the transformer manufacturer listing:
 - (A) the efficiency (expressed as a percentage), as measured according to 10 C.F.R. 431, Appendix A to Subpart K, or by a qualified alternative method as defined in 10 C.F.R. 429.70(d);
 - (B) the core loss value, 10 C.F.R. 431, section 4.4 of Appendix A to Subpart K, or by a qualified alternative method;

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- (C) the load loss value, corrected to the per-unit load value required for DOE certification, as measured according to 10 C.F.R. 431, Appendix A to Subpart K, or by a qualified alternative method and corrected to the per-unit load, as shown in equation 5.1 of appendix A; and
- (D) the full-load loss value at the rated temperature rise.

(3) Qualified Energy Inefficient Transformer

Applicants must provide evidence supporting the eligibility of the energy inefficient transformer, as defined in section V(b), and its core loss, including:

- (i) the technical specifications of the transformer, including:
 - (A) the serial number;
 - (B) year of manufacture;
 - (C) capacity rating in kilovolt-amperes (kVA);
 - (D) number of phases; and
 - (E) basic impulse level (BIL) rating (for dry-type transformers);
- (ii) a copy or image of the nameplate or, if the inefficient transformer was destroyed in an event that rendered it unusable (such as a fire), an authorized officer may certify the information contained on the nameplate by a signed written statement; and
- (iii) if the core loss value deviates from the tabulated values listed in section VIII, as determined using the information in paragraph (i), manufacturers must submit:
 - (A) the name of the qualified professional or equipment manufacturer who verified the core loss;
 - (B) a written statement from the entity in paragraph (A) confirming the value was determined using DOE's current test procedure; and
 - (C) the core loss value.

(4) Decommissioning and Scrapping

- (i) Applicants must provide evidence that the qualified energy inefficient transformer has been permanently decommissioned and scrapped or, if the replacement will occur in the future, a statement signed by an authorized officer certifying that the qualified energy inefficient transformer will be permanently decommissioned and scrapped within the next two years.
- (ii) Applicants must maintain a record of receipt from a third-party scrapping company with the date of decommission and serial number of the decommissioned transformer for a minimum of five years. DOE may, at any time in the five years following submission, request this record as evidence of decommissioning. Failure to provide this record will result in a surrender of the rebate to DOE.
- (iii) If the qualified energy efficient transformer was destroyed in an event that rendered it permanently unusable (such as a fire), an authorized officer may certify that fact by a signed written statement instead of providing a receipt of scrapping.

(5) Certification

Applicants must submit a statement signed by an authorized officer certifying that the information contained in the application is accurate.

VIII. Calculation of Rebate Payments

(a) Rebate Payment Calculation

Rebate payments will be calculated by subtracting the core loss (in watts) of the qualified energy efficient transformer from the core loss (in watts) of the qualified energy inefficient transformer and multiplying that difference by \$2.

(b) Maximum Rebate Payments

The limitation on total aggregate rebates a qualified entity may receive under this program, as specified in prior issuances, was waived in the first issuance of September 2023.

(c) Core Loss Determination

- (1) The core loss of the qualified energy efficient transformer must be provided by the manufacturer, as measured according to 10 C.F.R. 431, section 4.4 of Appendix A to Subpart K, or by a qualified alternative method.
- (2) The core loss of the qualified energy inefficient transformer is either:
 - (i) equal to the no-load loss measured by a qualified professional according to 10 C.F.R. 431, section 4.4 of Appendix A to Subpart K;
 - (ii) verified to have been tested by the equipment manufacturer according to 10 C.F.R. 431, section 4.4 of Appendix A to Subpart K; or
 - (iii) selected from the default values contained in tables 1–4 below based on the specifications of the transformer.

Table 1: Default Single-Phase Liquid-Immersed Transformer Core Loss Values

Capacity (kVA)	Core Loss (W)
10	31
15	42
25	62
37.5	84
50	105
75	142
100	178
167	263
250	357
333	444
500	604
667	752
833	891

Note: capacity is in kilovolt-amperes (kVA); core loss is in watts (W).

Table 2: Default Three-Phase Liquid-Immersed Transformer Core Loss Values

Capacity (kVA)	Core Loss (W)
15	52
30	90
45	124
75	185
112.5	255
150	320
225	441
300	553
500	770
750	1,061
1,000	1,332
1,500	2,026
2,000	2,543
2,500	3,033

Note: capacity is in kilovolt-amperes (kVA); core loss is in watts (W).

Table 3: Default Single-Phase Medium-Voltage Dry-Type Transformer Core Loss Values

Capacity (kVA)	20–45 kV BIL Core Loss (W)	46–95 kV BIL Core Loss (W)	≥ 96 kV BIL Core Loss (W)
15	104	128	132
25	146	180	188
37.5	192	236	247
50	232	286	300
75	305	374	396
100	370	455	481
167	521	641	682
250	683	840	897
333	439	910	974
500	971	1,194	1,284
667	1,178	1,449	1,562
833	1,367	1,681	1,816

Note: BIL is the basic impulse level in kilovolts (kV); core loss is in watts (W); capacity is in kilovolt-amperes (kVA).

Table 4: Default Three-Phase Medium-Voltage Dry-Type Transformer Core Loss Values

Capacity (kVA)	20–45 kV BIL Core Loss (W)	46–95 kV BIL Core Loss (W)	≥ 96 kV BIL Core Loss (W)
15	134	165	172
30	214	263	275
45	281	345	362
75	395	486	513
112.5	518	638	675
150	629	773	821
225	825	1,014	1,082
300	1,000	1,230	1,316
500	1,408	1,732	1,862
750	1,848	2,273	2,453
1,000	3,044	2,915	2,984
1,500	3,994	3,825	3,931
2,000	4,843	4,638	4,780
2,500	5,624	5,386	5,563

Note: BIL is the basic impulse level in kilovolts (kV); core loss is in watts (W); capacity is in kilovolt-amperes (kVA).

IX. Procedures for Processing Applications

(a) Processing Applications

- (1) Applications and notifications to the Department must be submitted to the application portal, at <https://doerebates.my.site.com/rebates/s/>, by end-of-day December 8, 2023, to ensure processing before the expiration of the program authorization.
- (2) Following submission of an application, DOE will review and consider the completeness of the application data and may request supplementary information relating to the application. When DOE is satisfied that sufficient information has been reported, the application will be reviewed for eligibility consistent with section 1006 and this guidance.
- (3) Questions about the program should be sent to doerebates@icf.com.

(b) Notice of Decision

- (1) DOE or a designated third-party will issue a written notice of the determination to each applicant:
 - (i) disapproving or approving the application as eligible for rebate payment, in whole or in part; and
 - (ii) setting forth the applicant’s amount of rebate payment.
- (2) If the application is denied in whole or in part, the written notice will include an explanation of the basis for denial.
- (3) Rebate recipients will receive a Form 1099.

X. Administrative Appeals

- (a) In order to exhaust administrative remedies, an applicant who receives a notice denying an application in whole or in part, must file an appeal within 30 calendar days of the date on the notice denying an application with the DOE Office of Hearings and Appeals, 1000 Independence Avenue, S.W., Washington, D.C. 20585, in accordance with the procedures set forth below and in accordance with the procedural regulations codified at 10 C.F.R. Part 1003.
- (b) If an applicant does not file an appeal in accordance with these requirements, the determination of DOE shall become final. If an applicant files an appeal on a timely basis in accordance with these requirements, the decision and order of the Office of Hearings and Appeals shall be final. If the Office of Hearings and Appeals orders a rebate, the Director of the Office of Hearings and Appeals shall send a copy of such order to the DOE Finance Office with a directive to make the required payment.
- (c) The appeal shall contain:
 - (1) a concise statement of the ground(s) upon which the applicant contests the written notice of DOE;
 - (2) a copy of the DOE notice;
 - (3) contact information (i.e., name, telephone number, mailing and e-mail addresses) for a representative able to respond to questions and provide information relevant to the appeal; and
 - (4) any data, documentation, or other relevant information supporting a showing by the appellant that the denial of eligibility or disallowance of payment, either in whole or in part, is arbitrary and capricious.
- (d) The appeal, including attachments, should be electronically filed with the Office of Hearings and Appeals (OHA), U.S. Department of Energy, at: oha.filings@hq.doe.gov. Upon filing, OHA will confirm receipt of the appeal and assign the appeal a case number.
- (e) The following matters are not subject to appeal:
 - (1) the denial of an application on the basis of untimeliness; and
 - (2) a proportional award of a rebate payment based upon DOE's determination that insufficient appropriated funds are available to make rebate payments on all eligible production to all qualified applicants.
- (f) The appeal process shall proceed as follows:
 - (1) An appeal under these procedures must be filed within thirty (30) days of an applicant receiving the determination by DOE denying eligibility or a claim for rebate payment, in whole or in part.
 - (2) In evaluating an appeal, OHA may require the submission of additional information by the appellant regarding any statement, data, documentation, or other information included in an appeal. OHA may also solicit and accept submissions of relevant information from other sources, including DOE, provided that the appellant is afforded an opportunity to respond to all such submissions. OHA may, on its own initiative, convene a conference or hearing if, in its discretion, it considers that such conference or hearing will advance its evaluation of the appeal. OHA will determine the scope and format of any conference or hearing convened under these procedures, as well as the parties allowed to participate.
 - (3) OHA may issue an order summarily dismissing an appeal if:
 - (i) the appeal is not filed in a timely manner, unless good cause is shown;

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- (ii) the appeal is defective on its face;
 - (iii) the appellant fails to provide additional information requested by OHA within the time specified by OHA; or
 - (iv) for any other reason that the appeal would be subject to dismissal under the OHA procedural regulations codified at 10 C.F.R. Part 1003.
- (4) OHA will provide DOE with the opportunity to submit a written response to an appeal within a period of time specified by OHA. OHA will provide the appellant with a copy of DOE's response and allow the appellant to submit a reply within a period of time specified by OHA.
- (5) Within thirty (30) days of receiving all required information, including additional information requested by OHA subsequent to the submission of the appeal, OHA shall issue a written decision granting or denying the appeal, in whole or in part. The decision shall include a written statement setting forth the relevant facts and basis for the determination. The date of the application filing for those submissions that have gone through the appeal process shall be the date OHA issues a written decision. Upon issuance, OHA shall serve an electronic version of the decision upon the appellant and the DOE Office of Energy Efficiency and Renewable Energy. The decision will also be published on the OHA website: <http://www.energy.gov/oha>. The decision of OHA shall constitute the final agency action and the appellant's final right of administrative review.
- (6) All expenses incurred by the appellant in pursuing any appeal before OHA shall be borne exclusively by the appellant.