

1. 5TH CLASS POWER ENGINEER CERTIFICATION

1.1 Introduction

This document is designed to outline ABSA's certification procedures and requirements for the 5th Class Power Engineer's Certificate of Competency. The certification requirements can be found in the [Power Engineers Regulation](#) and in the 5th Class Power Engineer's Reference Syllabus (AB-62), which can be found on the ABSA website using this [link](#).

1.2 Elements

A. Scope of Certification

The [Power Engineers Regulation](#) states the scope of certification for the 5th Class Power Engineer's Certificate of Competency. The holder is authorized to supervise power plants and heating plants, as shown in Row 5 of Table 1 and Row 5 of Table 4 of the Schedule.

B. Job and Task Description

A 5th Class Power Engineer's scope of practice may include the following:

- continuous supervision, general supervision, and/or overall supervision
- act as an assistant engineer, assistant shift engineer, chief power engineer, shift engineer, and/or shift operator
- may sketch, construct, install, operate, repair, and give advice on all things pertaining to the power plant that the holder is given the responsibility to operate, maintain, or supervise

More information regarding the scope of practice of a Power Engineer can be found in Sections 1–4 of the [Power Engineers Regulation](#).

C. Required Competence

A 5th Class Power Engineer must be competent in the operational and safety requirements of power plants and heating plants.

Before undertaking the certification examination the candidate must complete the applicable course offered through an Alberta Technical Institute. It is also recommended that the candidate obtain and become familiar with the [Safety Codes Act](#) and [Regulations](#).

Note: The Administrator may also determine the equivalent education for which credit may be granted and applied toward the educational requirements stipulated in the Regulation.

D. Prerequisites

The [Power Engineers Regulation](#) states that the prerequisites for certification include the following:

- pass the 5th Class or 4th Power Engineer's Certificate of Competency standardized examination
- education and work experience as specified in the Power Engineers Regulation

Note: Section 26(6) of the Power Engineers Regulation states the following.

“A person who holds both a Fireman's Certificate of Competency and a Building Operator B Certificate of Competency that are still valid may exchange those certificates for a 5th Class Power Engineer's Certificate of Competency.”

More information regarding eligibility from Building Operator B or Fireman's Certificate of Competency to 5th can be found on the ABSA [website](#).

E. Code of Conduct

The Power Engineers Regulation states the following with respect to code of conduct for a power engineer:

“Unsafe operation

5(1) A power engineer

(a) must take reasonable actions necessary to maintain a power plant, heating plant or thermal liquid heating system in a safe operating condition, and

(b) shall not operate a boiler, pressure vessel, power plant, heating plant or thermal liquid heating system if that power engineer is of the opinion that it is unsafe to do so.”

1.3 Certification Process Requirements

A. Criteria for Initial Certification and Recertification

The certification requirements are as follows:

- apply for examination
- pay the examination fee
- pass the required examination papers
- satisfy certification prerequisites

The [Power Engineers Regulation](#) (AR 85/2003) states that a “certificate of competency remains valid so long as it is renewed annually on or before the date specified by the Administrator.”

The recertification requirements for power engineers are as follows:

- submit a completed application form using form [AB-73](#)
- pay the renewal fee indicated on the application form
- or renew by paying online through the Power Engineer/Inspector Login

Information regarding certification and recertification can be found in [AB-62](#) and on the ABSA [website](#).

B. Assessment Methods for Initial Certification and Recertification

Applicants must meet the minimum requirements for initial certification, as outlined above in 8.3 A. A certificate is issued after a candidate passes the required papers for 5th Class Power Engineer certification and has submitted acceptable evidence of the required experience.

Applicants may contest the outcome of an assessment in accordance with ABSA’s policy on certification appeals. A request for an exam remark can be applied for using the Request for Exam Re-Mark form ([AB-242](#)).

C. Surveillance Methods and Criteria

It should be noted that a 5th Class Power Engineer may be subject to informal surveillance as part of the ABSA audit of their employer's quality management system.

D. Criteria for Suspending and Withdrawing Certification

The Alberta [Safety Codes Act](#) (42(3)) states that an Administrator may suspend or cancel a certificate of competency if the Administrator, on reasonable and probable grounds, is of the opinion that the person

- no longer complies with the requirements of this Act for a certificate of competency or
- does not comply with this Act when acting pursuant to the certificate of competency

E. Criteria for Changing the Scope or Level of Certification

Criteria for changing the scope or level of certification are detailed in the Power Engineer's Reference Syllabus (AB-55). Power Engineer certification progresses from entry level at 5th or 4th class through 3rd, 2nd, and 1st. The criteria for changing the level of certification are as specified for certification at the next level. There is no power engineer certification beyond 1st class.

1.4 Development, Review, and Validation

The Standardization of Power Engineers Examination Committee (SOPEEC) developed a 5th Class Power Engineer's Syllabus ([SOPEEC Syllabus](#)) that has been approved by the Association of Chief Inspectors (ACI) to be used across Canada. As provided for under the Power Engineers Regulation, the Administrator has established the Power Engineer's Reference Syllabus ([AB-53](#)) to identify the examination subjects for 5th Class Power Engineer's Certificate of Competency examinations. The subjects described in this syllabus are identical to the subjects in the SOPEEC Syllabus.

New examinations are developed by the SOPEEC Examination Coordinator in accordance with SOPEEC policy. ABSA serves as the SOPEEC Examination Coordinator and has developed subject matter expert task groups to review and validate power engineer examination questions.

1.5 Ongoing Review

SOPEEC members get together once a year to support collaborative development of power engineering syllabi and examination content, as well as to align certain certification requirements between provinces. The ongoing review of the certification process also involves input from the Interprovincial Power Engineering Curriculum Committee ([IPECC](#)). IPECC involves industry stakeholders and other parties in advising SOPEEC on matters related to required examination and syllabus content. IPECC members also meet together yearly. Industry participation in this committee ensures that curriculum learning objectives and certification requirements adequately reflect the knowledge and skills needed for candidates to safely operate the technologies seen in modern pressure equipment.