INSTITUTE OF MATERIALS, MALAYSIA

IMM Corrosion Certification Scheme

Certified Cathodic Protection Practitioner Level 3

Code: CPP-3 *HRDF claimable*

IMM Certified Cathodic Protection Practitioner Level 3 program will assess candidates who have acquired the IMM Cathodic Protection Practitioner Level 2 Certification and have acquired at least 3 years of post-certification experience in cathodic protection practice. Candidates who have not acquired the IMM Certified Cathodic Protection Practitioner (CPP) Level 2 but have met the minimum pre-requisite qualifications and have acquired at least 5 years of experience in cathodic protection practice may apply to sit for this program.

Reference standards (reference used shall refer to the latest published document):

- DNV-RP-B401: Cathodic Protection Design
- ISO 15257: Cathodic Protection - Competence Levels of Cathodic Protection Persons - Basis for a Certification Scheme
- ISO 15589-1: Petroleum, Petrochemical and Natural Gas Industries - Cathodic Protection of Pipeline Systems - Part 1: On-land Pipelines
- ISO 15589-2: Petroleum, Petrochemical and Natural Gas Industries - Cathodic Protection of Pipeline Transportation Systems - Part 2: Offshore Pipelines
- NACE SP0169: Control of External Corrosion on Underground or Submerged Metallic Piping Systems

Who should apply

Holders of the IMM Certified Cathodic Protection Practitioner Level 2 Certification with sufficient work experience, or non-holders of the IMM Certified Corrosion Monitoring Practitioner (CMP) Level 2 Certification who have met the pre-requisites recognized by IMM.

Objectives

This program is aimed to examine the knowledge and experience of the candidate who is expected to have acquired sufficient skills as a cathodic protection practitioner in order for him/her to manage a team of cathodic protection engineers, technicians and supervisors as well as to communicate with the stakeholders. He/she shall be examined not only in terms of technical knowledge and technical code-of-conduct and integrity, but also on his/her capabilities to manage a team of personnel under his/her wing.

Examination topics

- Electricity relevant to CP applications and measurements
- Corrosion, electrochemistry and coatings relevant to CP
- Theory, principles and criteria of CP
- Requirements related to the application of CP
- Application methods of CP, galvanic anodes, impressed current
- CP measurements and test procedures
- Relevance of voltage gradient errors and influence on the structure to electrolyte potential measurement
- Factors influencing the correct selection of reference electrodes for potential measurements
- Effects of excessive CP on coatings, high-yield strength steels and corrosion-resistant alloys

- Diagnostics of CP systems
- Interference conditions (alternating current and direct current)
- Standards and Codes of Practice relevant in CP practices.
- Health, Safety and Environmental issues relating to CP practices.
- Code of Ethics and Professional Conduct of all CP persons.
- Interpersonal communication skills.
- Report writing and technical analytical skills relating to CP practices including design calculations.

Examination format

Written examination
Oral interview

Candidates shall bring their own copy of the following standards and calculator.

- ISO 15589-1: Petroleum, Petrochemical and Natural Gas Industries - Cathodic Protection of Pipeline Systems - Part 1: On-land Pipelines
- ISO 15589-2: Petroleum, Petrochemical and Natural Gas Industries - Cathodic Protection of Pipeline Transportation Systems - Part 2: Offshore Pipelines
- NACE SP0169: Control of External Corrosion on Underground or Submerged Metallic Piping Systems

Examination duration

Written examination: 2 hours
Oral interview: 2 hours

Examination fee

As specified on the IMM website.

Candidate's criteria

Candidate should have

- Passed IMM Certified Cathodic Protection Practitioner Level 2 and shall show proof of having attended a minimum total of 5 days of IMM approved/recognized training course in cathodic protection within the last 3 years prior to this application. Training topics shall be referenced to ISO-15257 OR
- Passed IMM Certified Cathodic Protection Practitioner (CPP) Level 2 with a minimum of 3 years post-certification field experience in cathodic protection practices OR
- Candidates who have not acquired the IMM CPP Level 2 and shall show proof of having attended a minimum total of 10 days of IMM approved/recognized training course in cathodic protection within the last 5 years prior to this application. Training topics shall be referenced to ISO-15257 OR
- Candidates who have not acquired the IMM CPP Level 2 but have met the minimum pre-requisite qualifications recognized by IMM as per Tables A.1 & A.2 of Annex A in the ISO-15257 Standard and have acquired at least 5 years of experience in cathodic protection practice may apply to sit for the IMM CPP Level 3 Peer Review Examination OR
- Submit (with application in advance) his/her latest 3 years record of work experience with copies of actual work done in the field of cathodic protection, endorsed by candidate's superiors or clients OR
- Submit a testimonial of their total work experience in cathodic protection with details of employment dates, scope of work performed, and proof of continuous cathodic protection work without any lapse of more than 18 months. The testimonial must be endorsed by their latest employer or a representative from their client.

Pre-requisite training

A candidate without experience is required to attend IMM approved/recognized Cathodic Protection Practitioner Level 3 training course with a minimum duration of 3 days (24 hours) which prepares and provides comprehensive guidance and practice aligned to the topics covered in the examination.

A candidate with experience is encouraged to attend an IMM approved/recognized Cathodic Protection Practitioner Level 3 training course for examination preparation and scheme alignment.
Note: Evidence of training completion (where applicable) shall be submitted to the IMM prior to examination approval.

Criteria for certification

Pass the examination with a minimum total mark of 70% for each assessment.

Certificate awarded

IMM Certified Cathodic Protection Practitioner Level 3

Validity period of certificate

5 years

Re-sit of examination

A candidate who had failed in one or more of the examination parts can apply to re-sit for the failed component(s) of the examination within a year from the date of the first examination. The candidate shall have to pay the full examination fee for the re-sit and without the need to attend any pre-requisite training course.

Information on re-certification

Candidates may submit a recertification application up to six (6) months before or within six (6) months after the certificate expiry date. Applications submitted within this period will be processed as usual and may require attendance at a refresher course, if applicable.

Applications submitted more than six (6) months after the certificate expiry date require the candidate to:

- Attend the refresher course, if applicable; and
- Retake the certification examination, regardless of work experience.

Candidates may apply to renew their certification for an additional five (5) years within six (6) months prior to the expiry of the certification period (after either the initial 5-year certification or the subsequent 5-year renewal) by:

- Providing proof to IMM of employment in a related field; and
- Attending the refresher course, if applicable.

Candidates who have been out of the profession for more than eighteen (18) months at any point during a 5-year certification or recertification period must retake the certification examination.