

SEI API/PPA Certification and Accreditation Scheme

Issue 1 April 2014

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Introduction

To support the development of a quality based sustainable energy industry, the Sustainable Energy Industries Association of the Pacific Islands (SEIAPI) and Pacific Power Association has developed a certification/accreditation scheme for individuals and organisations (business entities).

The individuals are able to be certified as: i) designers; ii) installation (maintenance) technicians; iii) energy efficiency auditors; and iv) inspectors (of system installations). The organisation (or business entity) is able to be accredited as the supplier of products, systems and services. If there are any Individuals who operate as sole traders within the industry, for example they might sell and install RE equipment or be an energy efficiency auditor, then they must apply to be both a certified individual and an accredited organisation.

The program will have two levels of certification/accreditation: provisional and full. An individual will need to successfully complete a training course which has been recognised (and or specified) by SEIAPI/PPA. As the certification/accreditation program is an industry based program, SEIAPI/PPA wants to confirm that the individual is actually incorporating into their work what they have learnt in such a training course. Therefore both levels of membership, i.e. (i) the individuals and (ii) the organisations, will initially receive 'provisional' certification/accreditation after successfully completing the training. Full Certification would be provided after they submit evidence that they have applied the training received in their work.

For example, (i) A 'designer' for a PV stand-alone system design would provide a case study which would include a copy of the original system design including energy assessment, size of array (in kW), battery bank capacity(Ah) voltage, and the controller specification. (ii) An 'installer' for a PV standalone system would provide a case study including the circuit diagram specifying cable sizes, cable distance, fuse and circuit breaker ratings and photos showing the actual installation.

The scheme will operate for relevant technologies and for the various applications of those technologies, e.g. PV is a technology but it has different applications such as off-grid, grid connect and solar water pumping. Individuals and companies will obtain certification/accreditation for the particular areas in which they work.

Technologies that have been identified include:

- PV Grid connect systems
- Stand Alone PV Power systems
 - Level 1- Solar Home Systems
 - Level 2- Stand alone systems with/without Inverters
 - Level 3 Hybrid Power systems

- Wind Systems
- Energy efficiency
- Biomass Systems

This document contains the:

- Eligibility rules for applying - certified Individual
- Eligibility rules for applying – accredited business
- Approved Courses
- Rules for the SEIAPI/PPA Certification and Accreditation Scheme
- The procedures for renewal.
- Codes of Ethics
- SEIAPI/PPA Industry Best Practice Guidelines

SEIAPI/PPA Application Eligibility Rules: Certified Individual

Provisional Certification

An individual may apply to be provisionally certified in a particular discipline and technology after the completion of an approved course (see: *Approved Courses Section*). This is an industry based certification program, so an individual is provisionally certified until they provide evidence that they are applying what they have learned as part of the training requirements to their respective work activities.

The applicant submits an application that includes:

- Signed and completed application form.
- Signed form that they will abide by the code of ethics.
- Evidence of completion of the approved course/s.

Full Certification

A provisionally certified accredited person can apply to SEIAPI/PPA for Full Accreditation by submitting three case studies as proof of competence in the particular discipline and technology. Case study pro-forma sheets will be provided for the different certification classifications.

An upgrade to Full Certification Application must include –

- Signed and completed application form
- Signed form agreeing to abide by code of ethics
- Three case studies.

SEI API/PPA Application Eligibility Rules: Accredited Organisation

Provisional Accreditation

An organisation can apply to be provisionally accredited in a particular discipline and technology if:

1. The organisation has the relevant provisionally certified individuals either as a member of their staff or under sub-contract and this would allow the organisation to offer products and services in the respective technology. For example: (i) an organisation providing grid connected PV systems will have a provisionally certified designer and a provisionally certified installer/maintenance technician; (ii) an organisation offering energy efficiency services might need an individual who is a certified energy efficiency auditor.
2. The organisation meets all the in-country rules for operating a business. This could include being a registered company, having the appropriate insurances and appropriate licenses.
3. The organisation is financially sound (e.g. not bankrupt or in liquidation).

The applicant organisation submits an application that includes:

- Signed and completed application form.
- Signed declaration that the organisation meets all the legal requirements of the country of operation.
- Signed form that they will abide by the code of ethics.
- Signed declaration that the organisation is financially sound.
- The names of the provisionally certified individuals and proof that they are either on staff or sub-contracted to the organisation.

Full Certification

A provisionally accredited organisation can apply to SEI API/PPA for Full Accreditation for a particular discipline and technology by submitting evidence that their provisionally certified individuals are now fully certified in the respective technology and application.

An Upgrade to Full Accreditation Application must include –

- Signed and completed application form.
- The name/s and registration number/s of the fully certified individuals.

Approved Courses

SEIAPI/PPA, working together with the USP and other stakeholders, has formed the Renewable Energy & Energy Efficiency Training Competency Standards Advisory Committee and is forming the associated Technical Committees to develop a series of competency based standards for various technologies and their applications.

Approved courses are those conducted by training institutes which train and assess against these competencies.

Preferably the training organisation offering the courses should be accredited by a third party. The training institute should either be an institute accredited under their countries requirements or accredited by an international body such as the Institute for Sustainable Power.

As the accreditation and certification scheme is implemented, courses will be identified and listed within the SEIAPI/PPA (and other stakeholders) websites.

Rules: Accreditation and Certification Schemes

Individuals

1. Provisional certification is valid for a maximum of one (1) year. If, at the end of one (1) year, the individual is unable to present three (3) case studies, then the individual can apply for an extension at the discretion of SEIAPI/PPA.
2. Once fully certified, the individual is accredited for a period of three (3) years and must renew every three (3) years following the specified renewal process. This includes providing a statement of what professional development activities have been undertaken.
3. The individual must abide by all technical guidelines and standards that apply to their particular discipline and technology. Failure to follow these guidelines could result in the certification being suspended or revoked.
4. The individual must abide by the code of ethics.

Organisations

1. Provisional accreditation is valid for a maximum of one (1) year. If, at the end of the one (1) year the organisation does not have fully certified individuals in the relevant disciplines and technologies, then the organisation can apply for an extension at the discretion of SEIAPI/PPA.
2. Once fully accredited, the organisation is accredited for a period of three (3) years and must renew every three (3) years following the specified renewal process.
3. If at any time the organisation does not have, either as a staff member or sub-contractor, the relevant certified individual for their particular technology and application then the organisation must notify SEIAPI/PPA immediately and the accreditation will be suspended until the company has access to appropriately qualified individuals.
4. The organisation must abide by SEIAPI/PPA's industry best practice guidelines. Failure to follow these guidelines could result in the certification being suspended or revoked.
5. The organisation must abide by the code of ethics.

Renewal: Procedures

Individuals

A fully certified individual will submit a renewal application which includes:

- Signed and completed application form.
- Signed form agreeing to abide by code of ethics.
- One case study.
- Statement on what professional development activities have been undertaken.

Organisations

The fully accredited organisation submits a renewal application that includes:

- Signed and completed application form
- Signed declaration that the organisation meets all the legal requirements of the country of operation.
- Signed form that they will abide by the code of ethics.
- Signed declaration that the organisation is financially sound.
- The name/s and registration number/s of the certified individuals and proof that they are either on staff or sub-contracted to the organisation.

Code of Ethics

All individuals holding SEIAPI/PPA certification of any form:

- shall apply their skill and knowledge in the interest of their clients or employers for whom they act as faithful agents or trustees;
- shall regard as confidential any information concerning the business and technical affairs of their clients or employers;
- shall inform their clients or employers if circumstances arise, in which their judgment or the independence of their service may be compromised by reason of business connections, personal relationships, interests or affiliations;
- shall deal honestly and truthfully with clients, employers and government agencies in all matters pertaining to payments, discounts, rebates and grants and the conditions applying to them;
- shall design and/or install all systems in accordance with the SEIAPI/PPA guidelines and any relevant standards that are applicable in the country the system is being designed/installed.
- shall continue their professional development throughout their careers ; and
- shall not bring the sustainable energy industry into disrepute.

SEIAPI/PPA Industry Best Practice Guidelines

The SEIAPI/PPA Industry Best Practice Guidelines detail the actions, activities and procedures that an accredited organisation and/or a certified individual should apply to act as a quality organisation/individual and to provide customers with quality service.

These include:

- a) When a person or company enquires about potential services to be provided, the organisation shall respond in a professional manner and as quickly as practically possible.
- b) If a site visit is undertaken, the organisation's staff or their certified installer should undertake a thorough site visit as per the relevant training they have undertaken.
- c) When providing a quotation to a potential customer, the organisation should provide (as a minimum) the following information:-
 - Full specifications of the system equipment being offered including quantity, make (manufacturer) and model number, or if it is offering services, a detailed outline of the services to be provided will be given.
 - If a system is being supplied, the relevant warranty information relating to each of the items of equipment.
 - If it is a grid connect PV system, an estimate of the yearly energy output of the system. This should be based on the available solar irradiation for the tilt angle and orientation of the array. If the array will be shaded at any time, the effect of the shadows must be taken into account when determining the yearly energy output.
 - If it is a stand-alone system, the expected output (daily or yearly) of the system and how it meets the electrical energy requirements of the customer.
 - If it is a solar lantern or similar type of product, the promotional literature should provide an honest estimate of the expected performance.
 - If it is a biomass system, the expected output of the system stating the amount of fuel resource required.
 - If it is an energy audit quotation, then general information on the amount of potential energy savings should be included together with the potential yearly costs savings and financial returns.
 - Firm quotations which include all equipment and installation charges.
- d) When a potential customer agrees to purchase a system or services from the organisation, the organisation should have a simple contract for either the supply, installation and commissioning of the system or the provision of the required services as agreed. If possible, the contract should be signed by the customer before proceeding. The organisation should also sign the contract and each party (organisation and customer) keeps a copy of the contract.
Note: This clause should mainly apply to complete systems or services such

- as energy auditing. The use of this contract would not necessarily be appropriate for every purchase e.g. small solar lantern.
- e) When designing a system, the accredited organisation shall use a certified designer for the technology and its application. The certified designer shall follow the relevant guidelines for that application.
 - f) When installing a system, the accredited organisation shall use a certified installer for that technology and application. The certified installer shall follow the relevant guidelines and appropriate standards for that installation.
 - g) If carrying out an energy audit, the accredited organisation shall use a certified auditor. The certified auditor shall follow the appropriate guidelines and standards if available.
 - h) For system installation, the accredited organisation should provide the customer with a minimum of 1 year's warranty on the installation workmanship of the system and this would be in addition to the warranties offered by the manufacturers on the equipment supplied.
 - i) An accredited organisation should provide support to the customer when a product fails under warranty. This support will include liaising with the manufacturer or equipment agent on behalf of the client.
 - j) An accredited organisation should keep, as a minimum, the documentation relating to the system installed as specified in the relevant technical guidelines.
 - k) If a customer complains to an accredited organisation that the system has failed:
 - i. If the failure occurs within the 12 months' installation workmanship warranty period, the accredited organisation:
 - Should respond to the complaint in a timely manner.
 - If remote monitoring is available, this should be analysed to attempt to determine the fault. If the fault cannot be determined remotely then the response should involve arranging for a technically competent (preferably certified installer/maintenance technician) visiting the system to determine the fault and then rectify the fault as soon as possible.
 - If it is a fault arising from the installation workmanship, it is the accredited organisation's responsibility to rectify the problem.
 - If it is an equipment fault, the accredited organisation should liaise with the equipment manufacturer to fix the product as soon as possible.
 - ii. If the failure is after the 12 month's installation warranty period:
 - An accredited organisation should still provide back-up service to the customer and should respond to the complaint in a timely manner.
 - This response should initially involve attempting to determine

the fault remotely and then, if required, to organise a visit to the system to determine the fault and then to rectify the fault as soon as possible. A reasonable price should be quoted to the customer for the call-out, that is the price should be reflective of the price quoted for other work and not be higher than standard pricing because the customer has a problem with their system and needs help.

- If it is a fault in the installation's workmanship, the accredited organisation should provide the customer with a quotation for repairs.
 - If it is a fault in the equipment, the accredited organisation should liaise with the equipment manufacturer to fix the product as soon as possible. The cost in providing the repairs will be quoted to the customer. If the equipment is still under warranty, the cost should just be for the time spent travelling to/from site and onsite while undertaking the replacement (or repairs) of equipment unless this will be paid by the manufacturer.
- l) If a customer complains to an accredited organisation that they believe the system is not performing as stated in the quotation, the accredited organisation should request from the customer the evidence as to why they have come to this conclusion. If it appears that it is really not performing as anticipated, then the accredited organisation should investigate why in a prompt and professional manner.
- m) The accredited organisation should attempt to solve all complaints in a professional manner and directly with the customer to avoid the complaint being formerly lodged to SEIAPI/PPA.
- n) An accredited organisation or certified individual should not criticise the work of another accredited organisation or certified individual directly to a customer. If the accredited organisation or certified individual believes the other accredited organisation or certified individual has provided a poor system or service, then a formal complaint should be lodged to SEIAPI/PPA.
- o) If the complaint is formerly lodged to SEIAPI/PPA, the accredited organisation or certified individual should abide by the complaints procedures. (Note: this is still to be written)
- p) If a technical system audit (also called inspection) is undertaken of the work of an accredited organisation or certified individual, the accredited organisation or certified individual should respond to any reasonable request by the auditor (inspector) to fulfil his or her duties.
- q) The accredited organisation should incorporate or undertake implementation of quality management procedures in the daily operation of the business. This does not require the organisation to be ISO9001 accredited however they should have documented procedures for undertaking their work operations (e.g. providing quotes, organising system

installations, providing invoices, preparing documentation etc.), so that there is consistency in how they service the customers.