



**NOTES ACCOMPANYING**

**Best Practice Recommendation**

**For**

**Inspections of Production Devices and their**

**certified EECS Production**

Release 1.0

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AIB Working Group Internal Affairs

## 1. Introduction

The Issuing Body (IB) has the task to issue guarantees of origin that are “accurate, reliable and fraud-resistant” (art. 15 §5 Directive 2009/28/EC and art. 14 §10 Directive 2012/27/EC). For an EECS Issuing Body it is therefore important to have a guarantee on the quality and reliability of the measurement data on which basis EECS certificates are issued. With that, the whole reliability of the EECS certificate system stands or falls.

An important tool to ensure quality of such data, lies in the performing of onsite Inspections of Production Devices. However the cost of an Inspection is to be taken into account when designing Inspection instructions.

This document points some elements for further discussion on the extent to which PD Inspections would become obligatory.

## 2. Reference to EECS

Currently, onsite Inspections of Production Devices are recommended but not systematically obligatory according to the EECS Rules.

Following sections of the EECS Rules (release 7v7) refer to PD inspections:

- Definition of Production Auditor
- E3.3.7: why inspections (accuracy of info, compliance with rules)
- E3.3.11: scheme member shall conduct inspection “when appropriate”
- E3.3.12: inspections are likely to be appropriate when: (...)
- N4: inspections are also likely to be appropriate for biomass

On the question whether the EECS Rules should be extended, one could consider some suggestions copied from the Survey on PD Audits amongst members:

- Onsite audits should explicitly be part of the EECS Rules.
- The current EECS Rules only mention the auditing implicitly. They don't explicitly mention what exactly is required. In order to avoid fraud, inspections should be obligatory. Especially for biomass devices, there should be a check on whether the fuel is indeed renewable and on the metering scheme. Depending on the capacity of the PD, an inspection could be required. If no obligatory inspections, there should be at least a requirement that Issuing Bodies or Production Registrars regularly perform random audits.
- Strengthening the Audit of Production Devices in the EECS Rules would be better as we feel we do much more than many.
- We recommend distinction between small and large plants
- Re-registration of PD's is an administrative burden that has more use if accompanied by an onsite audit. Re-registration should only be obliged when major changes in the plant, e.g. capacity increase.

In the EECS Rules structure, one could wonder whether the following sections of the EECS Rules should also relate to PD inspections:

- D4 Production Device Acceptance Criteria,
- D6 Measurement Criteria,
- D7 Certification Criteria,
- D9 Rectification Criteria

### **3. Considerations on the economic feasibility of PD Inspections under EECS**

When considering the economic feasibility of PD Inspections, as a general criterion the cost of an Inspection needs to be balanced against the benefit of receiving EECS GOs. Therefore it needs to be considered whether efficiency gains can be reached by teaming up with another system that requires an Inspection of the Production Device.

#### ***Teaming up with other systems that require Inspection of Production Devices'***

Many RES-E Production Devices are already inspected or controlled in another framework than the EECS scope: within a national regulation, either with environmental or support for RES-E purposes. If such inspection or control can guarantee the quality of the measurement system, the accuracy of the meters used and the validity of the formula to calculate the net amount of RES-E, it may be considered unnecessary to add an extra inspection under EECS. Alternatively, the inspection criteria of the existing system could be complemented by extra inspection criteria for EECS.

Environmental audits, like the audits performed under the Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 19 March 2001 allowing voluntary participation by organisations in a Community eco-management and audit scheme (EMAS) provide an excellent framework for such collaboration with the EECS PD inspections.

#### ***Certifying the origin of all electricity***

For devices that aren't inspected under another scheme, and as guarantees of origin have a relatively low economic value per individual GO, it has to be considered whether the cost of the inspection doesn't destroy the motivation for applying for GOs. Indeed, AIB is balancing between the need to provide quality on the EECS certificates issued and the mission to certify the origin of all electricity.

### **4. Capacity categories of RES-E Production Devices in relation to inspection requirements**

In order to make an Inspection economically justifiable, the capacity and the amount of full load hours of a PD are determining factors, as they are directly impacting the quantity of GOs issued. With a sufficient amount of GOs issued, the Inspection can be economically justifiable for the producer. The difficulty in setting categories in Production Devices in weighing the economic benefit of GO-issuing against the inspection cost, are quite some fluctuating parameters like:

- GO prices vary between regions, technologies, ICSs, seasons, ...
- The amount of PD operating hours and annual full load hours of a Production Device varies depending on technology, weather circumstances, technical interruptions, fuel prices ... Therefore it is hard to set a limit for obligatory inspection based on operating hours. Also it is hard to ensure a Production Device reaches the expected amount of annual full load hours and subsequent amount of GOs.
- Inspection costs (reflecting inspectors time spent) are not always straight forward:
  - Inspection costs depend highly on the complexity of the measurement scheme and the preparation of the Production Device owner. An easy accessible straight forward measurement system where the PD owner provides all information including calibration certificates etc, will benefit a lot cheaper inspection than the case where the inspector has to gather all information and insights himself.
  - Inspection costs vary between countries: in a small densely populated country like Belgium with highly routined inspection bodies who need to travel only short

distances, inspection costs are much lower than in Finland, where large distances need to be crossed by inspectors towards their onsite inspections.

As a general statement, if not complemented by another scheme that motivates the electricity producer for inspection, and if the inspection cost is to be carried by the PD owner in the sole scope of his Application for EECS certificates, the inspections as described in the Best Practice Recommendations could be considered economically justified for Production Devices with nominal electrical capacity > 1 MW.

As regular inspections and the forthcoming guarantee of correct measurement data result in benefits for both the PD owner as the Production Registrar, it is advisable to try to find an economically justified way to organize for inspections for all capacities > 100 kW, if possible together with grid operator onsite visits, inspections for support schemes or environmental inspections, in order to reduce inspection costs. Smaller Production Devices could be submitted to random inspections organized by the Production Registrar, in order to obtain the expected quality.

## **5. Random Inspections, Targeted Inspections and Technology-specific Inspections**

In Domains where the cost of an Inspection puts a too heavy weight on the Production Device Owner and would discourage the application for EECS certificates, the cost of the Inspections could be carried by the Issuing Body, the Production Registrar or the Grid Operator. In that case a good practice could be to organise selective Inspections. These result also in a credible position of the IB or the Production Registrar amongst producers.

For technologies with relatively low possibilities for fraud, like hydropower without pumping, wind, solar, geothermal, tidal and wave energy, random Inspections can be sufficient. In order to achieve a sufficient level of credibility, a sufficient amount of random Inspections in the production park monitored by the Production Registrar should be made.

In case of fraud suspicion a targeted Inspection should be organised.

For biomass and biogas devices, especially with waste input flows, with auxiliary consumption and with mixed renewable-fossil fuel input, systematic inspections are advisable. Re-inspections are also mostly needed for these technologies.

Anyway an Inspection shall be conducted when the amount of electricity produced from renewable is not clear. This is always the case for

- a. waste incineration plants
- b. pumped storage facilities,
- c. biomass / biogas plants which may also use fossil fuels.

## **6. General Advice**

National situations from AIB members can differ significantly. Existing regulations are not always easy to change. In this diverse range of situations, many ways exist to meet the following principle:

With the above mentioned considerations in mind, it is advised that every member should do its best to install a reliable system to guarantee the quality of the amount of GOs issued.

The Best Practice Recommendation on PD Inspections provide a recommendation for those situations where a national regulation is to be modified and seeks guidance with respect to quality assurance and synchronisation to EECS.