

Update of PVQAT Task Groups— TG leaders 10.35 am to 12 Noon

Govind Ramu (SunPower Corp.) TASK GROUP 1

National Comments (Issued 12/4/2014 by Project Leader)

1	USA	27
2	CH	7
3	CN	19
4	CA	10
5	JP	6
6	DE	3
7	FR	1
8	IT	1
9	NC	1
10	PT	1
11	ZA	1
	Total	77

	P-members	O-members	Non-members	Total
Y: comments received	11	0	0	11
N: no comments	21	5	1	27
-: no response	3	8	0	11

Editorial	15
General	22
Technical	39
Other	1
Total	77

Courtesy: Yoshihito Eguchi-san

Draft Standard Comments – an Important Update

- Request to add Audit Checklist to conduct certification audits:
 - There is a general consensus among the core team. However following are the 3 major deployment questions:
 - ❖ Should the checklist in Annex D be included as an Annex in IEC 62941?
 - ❖ If so, should it be informative (for information) or normative (required as a minimum requirement?)
 - ❖ Would the checklist be more useful if it included some optional questions that help define a stronger QMS?
 - See Pros and Cons in the following slides

Question 1

YES '

Should the checklist in Annex D be included as an Annex in IEC 62941? '

PRO	CON
Consistent auditing across auditors and certification bodies. Improves audit effectiveness.	Audit focus shifting from actual audit to filling up lengthy checklists
Auditors don't skip any requirements inadvertently	Auditors spending vast majority of time in the meeting rooms and not walking through the manufacturing
Tool to collect evidence of compliance and audit notes – a traceable record for subsequent auditors to review and audit changes.	Auditor may not probe deeper using “process approach” . Tendency to just ask top level questions only from the checklist.
Auditor training aid on PV QMS standard requirements	Increase in Audit days (to accommodate audit and checklist documentation completion)

Question 2

Normative '

Should the checklist be provided as a suggested guide (referred to by IEC as “informative”) or as a minimum requirement (referred to by IEC as “normative”)?

Normative	Informative
Set minimum requirement for certification. Expected to complete as part of the audit process	Act as a guideline for requirements. Optional. Certification bodies may or may not use the checklist.
Consistency	Plausible Inconsistency
The certifying bodies are accustomed to developing their own checklist and a requirement of using a specific checklist may be objectionable to them.	Flexibility in application of certification body's own developed checklist.
Foundational ISO 9001 requirements are not mandated to have a checklist. This may result in auditors conducting audit partially with checklist and partially without checklist. Possible tactical issues.	Align with same expectation as foundation ISO 9001. Certification bodies that required checklist for 9001 from their auditors will embrace PV QMS Checklist irrespective of whether it is normative or informative.

Question 3

Additional rigor questions informative '

Writers identified multiple ways to strengthen IEC 62941 by asking more rigorous questions. Would the checklist be more useful if it included some optional questions that help define a stronger QMS?

PRO	CON
If informative, the additional rigor questions will be helpful to organizations as a collective knowledge of experience from broad range of Solar PV experts.	If normative, the additional rigor questions will become new requirements. This will require adding these requirements back to standard
Help address known failure modes in the industry. Helps with learning curve for new manufacturers	Organization may have to pay additional cost to conduct full coverage of checklist including "additional rigor" questions
Helps organization to reach higher levels of maturity. Raises the bar among manufacturers	Require additional guidance and training to ensure the "rigor questions" are well understood, consistently across the auditor community.
Potentially help organization achieve higher grading of QMS (once QMS Comparative ratings are rolled out)	May increase operational cost if not well understood and deployed

Auditor Training'

❑ Key components of auditor training

- Basic qualifications
- Experience (QMS and PV industry)
- Auditing experience (First party, second party, third party)
- Keeping auditing experience current (Audit log)
- Knowledge and experience in interpreting outputs of Quality Engineering applications (e.g. FMEA, SPC, MSA, etc.)

❑ Auditor training Material

- Interpretation guidelines
- Consistent training, periodic qualification as requirements change
- Develop criteria for qualifying training organizations.

Back up slides '



Certification Roll out Brainstorm (1/2) '

- Identify PV Module Manufacturing QMS certification body.
 - Proposed minimum criteria: Renewable energy division, international presence, accreditation of ISO 9001 certification
 - Process for periodic renewal and conditions for termination
 - Develop certification logo as proof of qualification to train, audit or certify to this standard.
 - Develop presentation for certification body to consider this standard as product offering. (Finance community backing of this standard as criteria/preference for contract bid).
 - Develop Market potential business case - PV Module manufacturing new registrations+ PV Module Manufacturing with existing ISO 9001 registrations.
 - Invite certification bodies to a seminar to launch this new standard.
 - Invite applications from registration bodies for review.
 - Approved registration bodies
 - Legal process and paperwork
 - Periodic renewal, termination, compliant management
 - Decide how to pay for the administration body- (Portion of certification fee or member organization annual fee or Govt. funding)



Certification Roll-Out Brainstorm (2/2) '

- Define Auditing process including:
 - Process: Audit person days -offsite, onsite, multisite, certification, surveillance, recertification, decertification
 - Auditors qualification: QMS audit expertise, PV Module experience + complete PV QMS training, pass exam OR PV Module experience + complete PV QMS training, pass exam accompanied by an experienced QMS expert auditor + typical certification body requirements
- Auditor training:
 - PV QMS interpretation document
 - Develop criteria to qualify training organizations
 - Manage certification of training organization and periodic renewal
- Quarterly, Annual Performance reporting on the overall process
- Certification and Training Volunteer committee – Annual or biannual term. (To oversee overall process)

SUNPOWER®

Thank you

Let's Change the Way our World is Powered