



PSMA

Reliability Committee

TIME: Wednesday, 9/9/20, 11-12pm CST

PLACE: Zoom (669-900-6833 or 408-638-0968), 272 780 335, <https://zoom.us/j/272780335>

MINUTES: https://www.pdma.com/technical-forums/reliability/meeting_minutes

ATTENDEES:

PRESENT?	COMMITTEE MEMBER
X	Tony O'Brien, Cisco – Co-Chair
X	Brian Zahnstecher, PowerRox – Co-Chair
	Joe Horzepa, PSMA – PSMA Representation
	Lisa Horzepa, PSMA – PSMA Representation
X	John Horzepa, PSMA – PSMA Representation
X	Ada Cheng, AdaClock – Member
X	Rick Fishbune, IBM – Member
X	Patrick Le Fèvre, Powerbox – Member
	Tim McDonald, Infineon – Member
	Steve Miller, SL Power (<i>RETIRED</i>) – Member
	Kevin Parmenter, Taiwan Semi – Member
	Shane Callanan, AEI – Member
	Greg Miller, Silanna – Member
	Mike Seeman, Eta One Power – Member
	Ed Massey, Ed Massey Consulting – Member
	Eric Swenson, IBM – Member
	Finbarr Waldron, Tyndall National Institute – Member CONFIRM MAILING LIST
	Bill Mallory, SL Power – Member
	Jon Fifield, Astronics – Member
	Burak Ozpineci, ORNL – Member – CONFIRM MAILING LIST
	Dao Zhou, Aalborg University – Member
	Huai Wang, Aalborg University – Member
	Shobhana Punjabi, Cisco – Member
	Patrick McCluskey, Univ of MD, CALCE Lab – Member
	Abhijit Dasgupta, Univ of MD, CALCE Lab – Member
	Hamish Laird, ELMG Digital Power – Member
	Francesco Carobolante, IoTissimo – Member
	Nitish Agarwal, SL Power – Member
	Manish Bhardwaj, TI – Member
	Evan Lucore, Artesyn – Member
	Gary Gong, Cisco – Member
X	Denis Downey, Cisco – Member

* Attending APEC

GREEN = NEW MEMBER, 1st MEETING (i.e. – introduce yourself)

ACTIONS (w/OWNER) HIGHLIGHTED BELOW

ACTION COMPLETED

AGENDA:

ANNOUNCEMENT: TONY RETIRING FROM CISCO AS OF EARLY-OCT '20, **WILL FIGURE OUT TRANSITION PLAN (FOR CO-CHAIR AND PSMA REP ROLES, JAMES BAEK FACILITATING)**. CONGRATS TO HIM ON THIS NEW ERA OF LIFE!!!

IF ANYONE IS INTERESTED IN CO-CHAIR ROLE, THEN PLEASE REACH OUT TO BZ RIGHT AWAY.

- **New Comm Introductions / Membership**
 - Elevator pitch intros, roundtable.
 - NEW MEMBERS =
 - New Member Recruiting

- **Comm Website / Purpose Statement**
 - Comm website up and running on PSMA.com ADA REPORTS FULL PSMA WEBSITE REVAMP UP BY END-JAN
 - **COMM = IF HAVE ANY GOOD RESOURCES, LINKS, PAPERS, ETC. TO POST ON WEBSITE (REMINDER, OPEN TO PUBLIC), THEN PLEASE SEND TO BZ & TO FOR POSTING VIA LISA.**

- **Initiatives**
 - New Committee Execution Strategy
 - Separate champions for key initiatives, run meetings accordingly.
 - 1. PS Comm Bus Reliability (*Brian*), 2. PTR Webinar(s) (**CHAMPION NEEDED**), 3. APEC '21 IS (**CHAMPION NEEDED**)

 - **Power Supply Communication Bus Reliability (BRIAN SPEARHEADS)**
 - Schedule (**BZ WILL COMMUNICATE TO BoD IN MTG THIS FRI**)
 - **1/6/20**: Project Kickoff Meeting
 - **PROJECT FROZEN PENDING BOB RESCHEDULING**
 - ~~5/18/20~~: Chapter 3 Completion Target
 - ~~5/25/20~~: Project Meeting (target CH. 2-3 REVIEW)
 - ~~6/1/20~~: Chapter 4 Completion Target
 - ~~6/8/20~~: Project Meeting (target CH. 4 REVIEW)
 - ~~6/15/20~~: Chapter 5 Completion Target
 - ~~6/21/20~~: Project Meeting (target CH. 5 REVIEW)
 - ~~7/6/20~~: Chapter 6 Completion Target
 - ~~7/13/20~~: Project Meeting (target CH. 6 REVIEW)
 - ~~7/13/20~~: Chapter 7 Completion Target
 - ~~7/20/20~~: Project Meeting (target CH. 7 REVIEW)
 - ~~7/20/20~~: Chapter 8 Completion Target
 - ~~7/27/20~~: Project Meeting (target CH. 8 REVIEW)
 - ~~7/31/20~~: Presentation of Draft Deliverables for Final Editing (**END OF SPECIAL PROJECT**)
 - ~~8/31/20~~: Presentation of Final Deliverables
 - ~~???~~/20: Webinar Target
 - Actions
 - SubComm Review Needs: **no team support requested until project back on-track**
 - TO notes we can hone expectation and “editing quality level” so **NEEDS TO PROVIDE FIRST-PASS REVIEW BEFORE PUSHING OUT RAW CAPTURE.**
 - Steve m. Notes proj should be sure to capture content/app exams outside of ICT (auto, medical, other common busses).
 - Project in frozen status, need to workout pivot/recovery offline with bob. **BZ/TO WILL ADDRESS WITH BOB DIRECT** Bob reached out on 7/20 to report he is back with a major focus on our project, but has been unresponsive since so not sure what

is going on. **BZ + JOE H. TO REACH OUT OFFLINE AND FIGURE OUT SITUATION, PLAN MOVING FORWARD. NO CHANGE AS OF 9/9/20, JOE ESCALATING WITH BOB, WILL REVISIT AS APPROPRIATE.**

- **PTR Webinars (**NEED NEW CHAMPION SPEARHEADS**):**
 - Topics? Speakers? Schedule? **FOR ANY WEBINAR, DECIDE IF PROPOSE TO PTR OR IF RELIAB COMM INDEPENDENT EVENT.** TO PREFERS TO PRIORITIZE FOR PTR, DEFAULT TO INDY IF JUSTIFIED.
 - **COMM ACTION: WEBINAR TOPICS, PERHAPS FROM WITHIN COMM.**
 - Bob White, Power Supply Communication Bus Reliability (pending special project activities **ON HIATUS**)
 - Steve Miller recommends Red Tiger Security, Jonathan Pollet (APEC/PSMA/EPRI '13 "Are you smart enough for the Smart Grid?" Workshop...see full report here: <https://www.pdma.com/technical-forums/energy-management/resources>)...Ada also attended and confirmed interest. **TO WILL REACH OUT TO JONATHAN TO GAUGE INTEREST, SOLICIT PROPOSAL, DET. IF APPROPRIATE FOR PTR OR STANDALONE.** No action taken, **TO WILL ATTEMPT THIS MONTH. BZ WILL ATTEMPT THIS MONTH.**
 - *"He presented a great high level view of IoT security applied specifically to malicious hacks of industrial and grid controllers."*
 - **Charles Hymowitz, AEi Systems**
 - *"Test vs. Analysis; what's the right ratio?"*
 - **Consider for PTR webinar? BZ TO REACH OUT. CHARLES CONFIRMS PRELIM INTEREST, ASKING FOR TIMEFRAME...ADA MENTIONS MAY HAVE ALREADY PRESENTED, JOHN/BZ WILL INVESTIGATE.** Has not given before so free to do so. PTR Comm requested more detail to justify as part of supporting PTR series. **BZ WILL PING AGAIN FOR RESPONSE TO PTR CLARIFICATIONS.** PTR Co-chairs now pinging (last 8/9/20) Charles direct for date. **BZ WILL CHECK ON STATUS WITH PTR TEAM.**
 - **Doug Kirkpatrick, CEO, Eridan Communications**
 - *"System Reliability for Small Cells Enable 5G"*
 - **Consider for PTR webinar? BZ TO REACH OUT. GIVING COMP TIME TO WORK OUT LOGISTICAL ISSUES FIRST, REVISIT IN LATER SEPTEMBER.**
- **APEC '21 INDUSTRY SESSION (**NEED NEW CHAMPION SPEARHEADS**):**
 - Prelim proposal for 4-slot session abstract submitted to APEC for consideration, **BZ WILL SHARE WITH MTG MINS.**
 - Ada notes importance to highlight interests of academics that need help understanding how to transition developments from research to production (particularly through lens of reliability). **COMM WILL NOTE AS FOCUS FOR SPEAKER SEARCH.**
 - Potential Speaker Chase List –
 - Ada suggests we consider highlighting collaboration efforts with IPC (particularly IPC-9592 or other investigation spearheaded by Rick/Eric).
- **General**
 - Post-mortem PS SW/FW Reliability Report Update

- Powerbox: given to design teams, lot of interest, inhibited by language barrier (Japanese in this case).
- SL: given to teams, already have Reliab stakeholders involved, driving change in FW review process.
- IBM: presented to some suppliers, neutral response so far, awaiting next major project kickoff for true assessment.
- Patrick notes similar activities kicking-up within EPSMA, **PATRICK WILL INQUIRE FURTHER TO SEE IF THERE ARE ADDITIONAL COLLABORATION OPPORTUNITIES.**
- Any other revenue-generating thoughts for PSMA?
 - Virtual Workshop (recent '20 Cap & Mag Virtual Workshop success as example)
 - Very well-received thus far, most seem to be ok with virtual format.
 - Joe notes guidance to reduce proposed event budget by ~20% for offset, F2F expenses, and pass through to attendee registration. Also, consider turning PS SW/FW Reliability Report into workshop theme.
 - **Viability determined by success of existing webinar efforts.**
 - Standards (primarily through conversion of existing project outputs)
 - Input into IPC-9592B standard update. Consider SW/FW input? **Rick former colleague of IPC CTO (Matt Kelly), will work with IPC/PSMA efforts to cultivate opportunity here. BZ to facilitate email discussion with Mike Hayes as part of overall PSMA/IPC collaboration efforts.** SW/FW report currently with IPC for review/feedback/suggestions. Eric also notes deep experience with this and interest in efforts. **IPC currently reviewing with their committees to determine best course of action.**
 - Offer supporting resources to enable utilization of PS SW/FW Reliability Report. **COMM ACTION TO SUGGEST OTHER POTENTIAL RESOURCES/TOOLS TO CREATE TO SUPPORT THIS.**
 - For example, extract a checklist from report to simplify barrier to entry (i.e. – team code review checklist). **COMM ACTION (ADA SPEARHEADING) TO PROPOSE LIST OF POTENTIAL TOOLS FOR DETERMINING ACTIONABLE PRIORITIES.** White paper? Checklist?
 - Thoughts from Nitish: commonly challenged by disconnect between SW/FW & HW stakeholder expectations...could be helped by Process Checklist (for code reviews, functional flowchart/review, test plan, etc.).
 - Thoughts from Ada: “Dashboard” of Metrics, Process Diagram, Prototyping & BIST...**ADA WILL EMAIL LIST w/ DESCRIPTIONS.** Ada sent analysis to Comm list 9/9/20, captured below for convenience (**REVIEW NXT MTG**):
 - **Those already in the report are as follows:**
 - * Sources of Coding Standards (p. 80)
 - * SW Development Process Audit Checklist (p. 85)
 - * Safety Assessment using a Risk Matrix to determine acceptable and unacceptable risks (p. 93)
 - * Regulatory inputs for software quality (p. 98)
 - * Example Software Quality Specification (pp. 98-100)
 - * Software Development Process Assessment Template (pp. 101-104)
 - * Software Security Assessment Specification (pp. 104-105) includes security checklist (also on p. 150)
 - * Digital PSU Verification Test Plan Example (pp. 106-109)

- * Development Team Specifications (pp. 110-112) includes PSU Functional Partition Specification Template, & SW Interface Specification Template.
 - * Testing Checklist example (p. 159)
 - **Some proposed resources/tools that are not currently in the report:**
 - * Process Flow Diagram
 - * “Dashboard” of metrics
 - * Design checklist?
 - * Code review checklist?
 - * Software release checklist?
 - * BIST examples?
 - **Some inputs on the report for next phase/revision:**
 - * Add prototyping?
 - * Need to define code escrow
- **Next Meeting**
- Wed 10/14/20, 11am CST.
 - Regular Schedule = 2nd Wed of each month, 11am-12pm CST