

Energy Efficient Ethernet Call-For-Interest Summary and Motion

IEEE 802.3 Working Group

Dallas, TX

November 16, 2006

Presentations for the CFI

- ***Network Energy Use*, Bruce Nordman, Lawrence Berkeley National Lab**
- ***Reducing Ethernet Energy Use*, Hugh Barrass, Cisco**
- ***The Feasibility of Energy Efficient Ethernet*, Howard Frazier, Broadcom**
- ***Why Energy Efficiency Now?*, Mike Bennett, Lawrence Berkeley National Lab**

CFI Presentation Supporters

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China Standard Certification Center
Cisco
Cisco
EPA
European Commission DG JRC
Force10 Networks
Force10 Networks
HSP Design
IBM Research
IBM
Intel
Intel
KeyEye Communications
Lawrence Berkeley National Lab
Marvell
LAN Technologies
Nortel Networks
Plato Networks
Samsung
Samsung
Solarflare
Sun
Teknovus
Tennessee Valley Authority
Teranetics
Teranetics
UNHIOL
Yahoo!

* Requested to be added as supporters at the CFI

Summary

- **Attendance:**
 - 73 people
 - 37 802.3 voters
- **Why form a study group now?**
 - **Energy use is a growing issue**
 - **End users want to lower operating costs**
 - **Estimated nearly \$500M per year savings if 100% adoption of EEE**
 - **Energy industry is offering incentives for energy efficient products**
 - **U.S. Congress passed H.R. 5646 directing EPA to “study and promote” energy efficient servers**
 - **Energy Star requirements coming in 2009 for “standards that provide for quick transitions among link rates”**

Study group focus

- **The goal is to:**
 - *Reduce power during low link-utilization*
 - *Remain compatible with existing cabling infrastructure*
- **Issues for study include:**
 - How to minimize transition time?
 - How to avoid thrashing between speeds?
 - Interaction with higher-layer protocols
 - Link utilization on servers
 - Interaction with control policy

Call-For-Interest

- **Should a Study Group be formed for “Energy Efficient Ethernet”?**

Y: 65 N: 2 A: 6

Straw Polls - Participation

- **I would participate in the “Energy Efficient Ethernet” Study Group in IEEE 802.3.**

Tally: 26

- **My company would support participation in the “Energy Efficient Ethernet” Study Group in IEEE 802.3**

Tally:19

Motion

- Move that the IEEE 802.3 working group request formation of an *Energy Efficient Ethernet* IEEE 802.3 study group to evaluate methods to reduce energy use by reduction of link speed during periods of low link utilization

M: Mike Bennett

S: John D'Ambrosia

>50%

802.3 voters: Y: 51 N: 2 A:6