



INDUSTRY APPLICATIONS SOCIETY

Pulp & Paper Industry Committee

**IEEE/IAS PULP & PAPER INDUSTRY
COMMITTEE**

MINUTES
of the

FULL COMMITTEE

MEETING

2000 ANNUAL COMMITTEE MEETING
ATLANTA, GA
JUNE 18-23, 2000

IEEE/IAS PULP & PAPER INDUSTRY COMMITTEE
FULL COMMITTEE MEETING
JUNE 19, 2000

WELCOME AND INTRODUCTIONS.....	4
SECRETARY’S REPORT.....	4
TREASURER REPORT/CONFERENCE AUDITS.....	4
STANDING SUBCOMMITTEE REPORTS.....	4
MEMBERSHIP.....	4
MAILING LIST.....	5
PUBLICITY.....	5
PAPER AWARDS AND PUBLICATIONS.....	5
FELLOWS NOMINATIONS.....	5
PPIC AWARDS.....	5
LIAISON REPORTS.....	5
TAPPI.....	5
CPPA.....	5
IEEE/IAS.....	5
IEEE - STANDARDS COORDINATING.....	6
IEEE – 841 COMMITTEE MEETING REPORT.....	6
OPERATING SUBCOMMITTEE REPORTS.....	6
EMMC.....	6
PDS.....	6
TSSC.....	6
DCS.....	7
CBS.....	7
2000 ATLANTA CONFERENCE REPORT.....	7
2000 ATLANTA TECHNICAL PROGRAM.....	7
2000 IAS CONFERENCE IN ROME.....	8
FUTURE CONFERENCES.....	8
2001 – PORTLAND, OR.....	8
2002 – TORONTO, ON.....	8
2003 – CHARLESTON, SC.....	8
2004 – VANCOUVER, BC.....	8
2005 – ORLANDO, FL.....	8
OLD BUSINESS.....	9
NEW BUSINESS.....	9
APPENDIX A: FULL COMMITTEE AGENDA.....	10
APPENDIX B SIGN IN SHEETS.....	12
APPENDIX C EMMC SUBCOMMITTEE.....	16
APPENDIX D PDS SUBCOMMITTEE.....	22
APPENDIX E TSSC SUB COMMITTEE.....	25

APPENDIX F	DCS SUBCOMMITTEE.....	26
APPENDIX G	CBS SUBCOMMITTEE.....	37
APPENDIX H	MEMBERSHIP REPORT.....	39
APPENDIX I	PAPER AWARDS AND PUBLICATIONS	44
	IAS Magazine	44
	Industry Application Transactions.....	44
	Technical Paper Award Winners from 1999 Conference in Seattle	46
APPENDIX J	SCC #18 FORM AND LETTER	47

**IEEE/IAS PULP & PAPER INDUSTRY COMMITTEE
ANNUAL MEETING
MINUTES OF THE FULL COMMITTEE
WAVERLY HOTEL
ATLANTA, GEORGIA**

JUNE 19, 2000

WELCOME AND INTRODUCTIONS

Larry Thomas called the meeting to order at 1:08 PM. He introduced himself and then asked everyone to introduce himself or herself.

SECRETARY'S REPORT

Ron Simpson announced that 19 were in attendance at the Executive Committee meeting. The meeting started at 4 PM Sunday afternoon and ended at 6:48 PM.

The minutes to the last Committee meeting were sent out. Ron made the following report on the mail out of the minutes.

Total Active Members	134
Total Email	111
No Emails (postal)	23
Undeliverable Emails	12

A motion was made and passed to accept the minutes. Alan Lowe passed around a sign in sheet for the meeting and asked attendees to sign in.

TREASURER REPORT/CONFERENCE AUDITS

Phil Fransen reported that he had contacted IEEE Finance Chair Ahamik Hindmon on close out of the Seattle conference. The audit has been sent to the IEEE for review. A draft report will be available in 2 weeks.

STANDING SUBCOMMITTEE REPORTS

MEMBERSHIP

Alan Lowe reported that membership is now 132 members. There are 10 applications for membership pending. Since the last interim meeting there have been the following changes: 4 members have resigned, there are 2 new members and 10 members have been dropped from the roles for nonparticipation.

New Members:

Jasper Parke
Anibal Valenzuela

Resignations:

Jay Banerjee
John T. Kay
Tom Shearer

Dropped:

Kirk Armintor
Brian Kochan
Phung Le
Indra Madan
Joe Miller
Zafer Mohiuddin

Dick Morrison
Jim Poole
Michael Riverin
Chand Tailor

MAILING LIST

Bob Morse reported that the mailing list was updated with the 1999 corrections from the conference mailing list books and the added names sent to the ML coordinator during the year. Bob sent the revised ML disk to the Atlanta committee for their use in generating the mailing labels for the 2000 conference. Bob reminded attendees that the mailing lists needs to be updated. The subcommittee chairs should announce that the mailing list needs to be updated in their meetings. The presiding officers for each session should also announce the mailing list to attendees.

PUBLICITY

Ron Meihofer reported that the publicity report was not sent out to the IAS till the end of April. The publicity will appear in the July/August issue of the IAS magazine. Ron was late with the report due to two sons getting married and his lap top crashing. Ron will send an electronic copy of the publicity to the Secretary Ron Simpson.

PAPER AWARDS AND PUBLICATIONS

Laurie Cylar reports for Rhonda Banks. Laurie announced the awards for papers at the last conference (see appendix). PPIC has recommended 6 papers for publication in the IAS Magazine and 4 papers for publication in the IAS Transactions. Paper reviewers for the 2000 conference are:

EMMC	Robert Montgomery
PDS	Bill Vilcheck
TSSC	Ralph Shead
DCS	Duncan Rhodes
CBS	Blake Lloyd

FELLOWS NOMINATIONS

Clayt Reid reports that John Holmquist has been renominated for IEEE Fellow. Jim Rooks is helping with the nomination.

PPIC AWARDS

Russ Thrift announced that PPIC will honor Burt Judson with the Meritorious Service Award and S. P. Reddy with the Meritorious Engineering Award at the Banquet Wednesday night. Russ encourages committee members to congratulate Burt and S. P. during the next two days.

Liaison Reports

TAPPI

Burt Judson reports that TAPPI had its annual conference in March in Williamsburg this year. The interim meeting will be in Atlanta September 17-18. Next spring conference will be in San Antonio.

CPPA

Clayton Reid reports that CPPA annual meeting is at the end of January.

IEEE/IAS

Clayton Reid reports that the annual meeting will be in Rome, Italy this year. PPIC has representatives at the Rome conference. Membership tables are available for new attendees. PPIC offers free membership in IAS if the attendee joins the PPIC. IAS shirts are available for \$25. Clayt also needs 1 or 2 more unusual failures for the Friday morning session.

IEEE - STANDARDS COORDINATING

Jim Daly reports that SCC #18 met in February in St. Louise. They will meet again in December or January to review and vote on the public comments to the proposed changes in the NEC regarding local disconnects for motors.

IEEE – 841 COMMITTEE MEETING REPORT

Austin Bonnett called the chair of the 841 committee. The 841 standard will be approved and issued in the fall. The PCIC committee met and approved a paper to evaluate motors by the 841 standard.

OPERATING SUBCOMMITTEE REPORTS

EMMC

Bruce Campbell reports that his committee had 17 persons present this morning out of a membership of 26. EMMC had 5 excused absences and 4 unexcused absences with 1 new member. EMMC has 11 papers and 1 panel for the Atlanta conference. (see report in Appendix)

Next years papers that have been identified are:

Number	Type
3	B
3	C
4	D
7	E

PDS

Cliff Norman reports 30 members in attendance this morning out of a membership of 45. (see report in Appendix)

Next years' papers that have been identified are:

Number	Type
1	B
6	C
6	D
3	E

TSSC

Bob Jordan reports 15 members with 10 present. There were 3 excused absences, 2 unexcused absences and 2 guest. This committee has 1 paper and 1 tutorial for the Atlanta conference. (see report in Appendix)

Next years' papers that have been identified are:

Number	Type
3	C
1	D
6	E

Bob reports that the proposed changes to NFPA concerning the NEC may impact PPIC. The changes have been accepted by SCC#18 and will require a 2/3 vote by that committee to reverse the acceptance. Bob makes a motion that the PPIC form an ad hoc committee to review the proposed changes, contact mills and make recommendations to SCC#18. He recommends that industrial factories with adequate supervision and maintenance should be exempted from the proposed requirements as they are with other sections of the code. The motion is seconded by Ron Mehofer and approved by committee vote.

Members of the ad hoc committee will be volunteers. Bob Jordan will sign up volunteers after the meeting today. The deadline for comments to SCC#18 is Oct. 21. Forms must be used to submit comments to SCC #18. Submittal can be

multiple pages. Jim Daley will email forms to secretary Ron Simpson for inclusion in the minutes (see attached adobe documets).

DCS

Del Seaver reports 34 present with 6 excused absences, 4 unexcused absences, and 4 guest. (see report in Appendix)

Next years' papers that have been identified are:

Number	Type
1	A
5	B
10	C
2	D
5	E
1	Panel

Dunkin Rhodes is the paper grader assigned for both Atlanta and Portland.

CBS

John Thompson reports 5 of 11 members present with 4 excused absences and 2 unexcused absences. CBS had 3 guest this morning. The paper reviewer is Janet Flores. (see report in Appendix)

Next years' papers that have been identified are:

Number	Type
1	A
3	C
3	D
9	E

2000 ATLANTA CONFERENCE REPORT

Charlie Canty reports that as of this morning:

200	Registered
70	Guest
36	First Time Attendees
23	Factory Tour
33	Generator Tutorial
18	Safety Tutorial

2000 ATLANTA TECHNICAL PROGRAM

Roger Jones reports that last year at this time the total papers reported for the Atlanta conference were:

Number	Type
19	A
17	B
19	C
8	D
11	E
3	Tutorials
1	Panel

At this time the papers identified for the Portland Conference are:

Number	Type
2	A

9	B
25	C
16	D
30	E

At this time last year we had 27 A+B papers for the Atlanta conference. We have 11 A+B papers identified for the Portland conference.

Registrants will receive a CD ROM with the conference record this year. On page 217 there is a bibliography of TAPPI, CPPA and PPIC conference papers since 1966. In addition, the conference record for Atlanta is also on the CD ROM. Roger encourages attendees to read the "readme" file before reviewing the contents of the CD.

2000 IAS CONFERENCE IN ROME

Larry Thomas reports that the PPIC has committed to fill one session at the Rome conference. Larry coordinated with the IAS on the conference. PPIC will have 5 papers from our committee. IAS publishes a call for authors and papers on their web site which contained Larry's email and PO box. This resulted in 1 paper from Germany which was reviewed by DCS. The paper was academic but it was approved and sent to the IAS. Larry did not necessarily approve of the conclusions of the paper.

Mark Weaver will cochair the PPIC session. The IAS standard format is overhead projector and not power point as it is with PPIC. They limit papers to 8 pages in length to be compatible with the IAS Transactions requirements.

FUTURE CONFERENCES

Phil Fransen reports that 5 future sites have been chosen for the PPIC conference.

2001 – PORTLAND, OR

George Matto reports that all arrangements have been made with the Marriott Hotel. The hotel rate will be less than Atlanta. The conference dates are June 17-22 to coincide with the Rose Festival which includes cart races and an air show.

2002 – TORONTO, ON

John Kay reports that the conference will be the week of June 16, 2002. The Sheraton Center is a five star hotel located in downtown Toronto. The hotel is linked by 12 miles of underground tunnel system to the downtown area. Toronto has the Maple Leafs, Raptors and Blue Jays sports teams.

The local committee is now forming with volunteers. The first meeting will be in the fall of this year.

2003 – CHARLESTON, SC

Laurie Cylar reports that the hotel will be Charleston Place. In July for the weeks of 6-10 or 20-24 the hotel rate is \$159. June rates are \$213 in 2001. The week of July 20 is preferred over the week after July 4.

2004 – VANCOUVER, BC

Phil Fransen reports that he is negotiating the hotel rate. The Princess Hotel is very expensive.

2005 – ORLANDO, FL

Rick Butler reports that in 2005 the PPIC will return to the Florida theme. The first PPIC conference was held in Florida in 1956. No dates have been set as yet. No other details available.

Phil is looking for suggestions for conferences for 2006 and beyond.

OLD BUSINESS

Larry Thomas reports that the interim meeting will be on Oct 22-23, 2000 in Orlando at the Hyatt Hotel. The change of venue resulted from a questionair to committee members for alternatives to Atlanta. Atlanta is viewed as difficult to book hotels and the air fares are high. The meeting is set on Monday to allow cheaper air fares for overnight Saturday stays. He suggest that a tour of the Disney generation facility is possible but it must be on a Sunday afternoon.

NEW BUSINESS

Larry Thomas, Burt Judson and Dave Rollay are the nominating committee for new officers. Larry reports that the following persons have been nominated for officers for the conferences 2001-2002 and the preceding interim meetings.

Roger Jones	Committee Chair
Ron Simpson	Technical Program Chair
Rory Johnson	Secretary
Blake Lloyd	Treasurer

The nominations are approved by unaimous vote. Larry handed out Nominations Committee report which states that the term of office for the nominees is two years starting July 1, 2000 and ending August 31, 2002.

Jim Daly made a motion that PPIC recommend to SCC#18 that industrial facilities be exempted from the proposed change in the NEC requiring local disconnects for motors. The motion is approved by unanimous vote. A letter will be sent out by the secretary to the chair of SCC#18 to make this official. (see letter in Appendix)

Lanny Floyd spoke on the electrical safety workshop in Toronto Jan. 24-26, 2001. This workshop is sponsored by PCIC and PSEC.

Jim Rooks was acknowledged for having driven the increase in Senior Membership applications.

George Matto commented that PPIC members need to promote attendance and membership in PPIC in their mills.

Larry Thomas point out that the information on the proposed changes in the NEC will have a greater financial impact on the mills than the cost of attendance at the PPIC conference. Disimination of this and other in formation has great value to the mills.

The meeting was adjourned at 2:46 PM.

Appendix A: FULL COMMITTEE AGENDA
IEEE PULP & PAPER INDUSTRY COMMITTEE
ANNUAL MEETING
RENAISSANCE WEVERLY HOTEL - ATLANTA, GA
MONDAY, June 19, 2000
1:00 PM

- | | |
|---------------------------------------------------------------------------|------------------|
| 1 - Welcome & Introductions | Larry Thomas |
| 2 - Review/Approval of Minutes of 9/13/99 Meeting | Ron Simpson |
| 3 - Executive Committee Report | Ron Simpson |
| 4 - Treasurers Report/Conference Audits
a - Seattle Audit Report | Phil Fransen |
| 5 - Standing Subcommittee Reports: | |
| a - Membership | Alan Lowe |
| b - Mailing List | Bob Morse |
| c - Publicity | Ron Meihofner |
| d - Paper Awards and Publications | Ronda Banks |
| e - Fellows Nominations | Clayton Reid |
| f - PPIC Awards | Russ Thrift |
| 6 - Liaison Reports: | |
| a - TAPPI | Burt Judson |
| b - CPPA | Clayton Reid |
| c - IEEE-IAS | Clayton Reid |
| d - IEEE - Standards Coordinating | Jim Daly |
| e - IEEE – 841 Committee Meeting Report | Austin Bonnett |
| 7 - Operating Subcommittee Reports: | |
| a - EMMC | Bruce Campbell |
| b - PDS | Clifford Normand |
| c - TSSC | Bob Jordan |
| d - DCS | Del Seaver |
| e - CBS | John Thompson |
| 8 - 2000 Atlanta Conference Report | Charlie Canty |
| 9 - 2000 Atlanta Technical Program & 2001 Portland | Roger Jones |
| 10 - Future Conferences: | |
| Future Conference Sites | Phil Fransen |
| 2001 - Portland, OR | George Matto |
| 2002 – Toronto, ON | John Kay |
| 2003 Charleston SC | Rhonda Banks |
| 2004 Vancouver or Victoria, BC | Phil Fransen |
| 11 – Other Old Business | |
| a Interim meeting Orlando Florida October 22-23, 2000 at
HYATT Orlando | the Larry Thomas |
| 13 – New Business | |

Adjourn Full Committee Meeting approximately 3:15 PM!

APPENDIX B

SIGN IN SHEETS

APPENDIX B

SIGN IN SHEETS

IEEE PULP & PAPER INDUSTRY COMMITTEE

FULL COMMITTEE MEETING

MONDAY JUNE 19, 2000

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IEEE PULP & PAPER INDUSTRY COMMITTEE
 FULL COMMITTEE MEETING MONDAY JUNE 19, 2000

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IEEE PULP & PAPER INDUSTRY COMMITTEE

FULL COMMITTEE MEETING

MONDAY JUNE 19, 2000

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Roger Jones			
Larry Thomas			

APPENDIX C EMMC SUBCOMMITTEE**IEEE- IAS PULP & PAPER COMMITTEE
ENGINEERING MANAGEMENT, MAINTENANCE and CONSTRUCTION
SUBCOMMITTEE
June 19, 2000**

(IEEE MINUTES JUNE 2000)

Our committee consists of 28 people, including newcomer Tom Grudkowski of USEM. We had 19 attendees, 5 excused absences, and 4 unexcused absences. Larry Layman and Lloyd Cain are now retired. The need to develop some new members was discussed, and we will try to extend a few invitations for newcomers to attend the interim meeting in Orlando this October.

EMMC sponsored 11 papers and one panel discussion in the 2000 Atlanta conference. We are also sponsoring one of the papers to be given at the IAS conference in Rome this October. Sincere thanks to all members of our sub-committee for this excellent showing!

We identified 18 potential papers for the 2001 conference. Of these, 3 were classified as "B" papers, 3 as "C" papers, 4 as "D" papers, and the remaining 8 are still in the "E" category. Obviously, we have a lot of work to do between now and October's interim meeting in order to duplicate or improve on our 2000 effort. Please review the attached "Technical Paper Summary" and follow-up on the various action items at your earliest convenience.

We nominated Frank Newman for the 2001 Meritorius Service Award. Robert Montgomery was our paper-grader for this year's conference, while Roland Roberge and Rich Carle agreed to help with facilities during Session 1 of the paper presentations. Laurie Cihlar expressed interest in working with Blake Lloyd in the future to provide technical assistance to the paper presenters.

Other topics of discussion included future conference sites, the new "CD-ROM" cross reference of past papers back to 1966, and ideas for improving overall conference attendance.

Improved early communication of conference schedules and objectives to mill managers was felt to be a key factor in improving attendance. A list of scheduled papers should be included, and perhaps the new "CD-ROM" could be used as a sample of past conferences. A website listing and describing all papers finally selected for the next conference would be most helpful not only to mill managers, but also to prospective attendees. Likewise, it was felt that a website describing sub-committee activities and responsibilities, as well as a formal mailing packet that could be sent with a letter of invitation, would be useful in recruiting new members for the sub-committees.

Finally, a lively discussion of the proposed NEC changes described in Mike Glenn's letter caused our meeting to run overtime. The overwhelming consensus was that requiring lockouts to be located within sight of each motor would not result in any improvement over the current properly followed lockout procedures now in use. Furthermore, there exists the possibility of actually promoting carelessness....someone who can see the lockout might be tempted to take things for granted and neglect to follow the lockout procedure.

FUTURE PAPERS

97.05 Current Practices in the Installation of Control Systems

Sponsor: Rick Watkins

Author: Del Decker

Reviewers: Burt Judson, Laurie Cihlar, Rich Carle, Dave Durocher

Classification: B - 2001

Comments: Del Decker has committed to doing the paper for 2001, and will forward a copy of his outline to the four reviewers.

98.04 Silicone Transformer Maintenance

Sponsor: Larry Menche

Author: Larry Christodoulou

Reviewers: Rick Watkins, Bill Polley, Phil Poole, Del Decker

Classification: D-2001

Comments: Larry Christodoulou (Electric Power Systems) has expressed interest in doing a paper on this subject. Topics of interest include leaky seals, oil testing, special tests on silicon fluid. Paper may need to expand to other types of transformers to cover a bit broader scope. Items mentioned were dissolved gas testing, long-term maintenance, and some case histories. Larry Menche will confirm with Mr. Christodoulou that he will be able to present the paper in Portland in 2001.

98.11 Reliability Improvement with Voting Schemes

Sponsor: Russ Thrift

Author: Robert Wood

Reviewers: Rory Johnson, Rick Watkins, Wayne Vinson

Classification: B-2001

Comments: Russ contacted Robert Wood (Nova Chemical-Texas) who wrote a paper on this subject (relaying, protective devices, trip-current logic) for Intech magazine. We need to find a co-author from a mill to help bring a pulp & paper perspective to this paper. Russ Thrift and Wayne Vinson will pursue this with Mr. Wood.

98.15 Hazardous Classifications in the New National Electric Code

Sponsor: Peter Baen/Rick Watkins

Author: Peter Bennett (England)

Reviewers: Robert Montgomery, Rory Johnson, Rhonda Banks

Classification: E-2001

Comments: Peter Bennett (ABTech) wrote and submitted a rough draft that was reviewed, but was not able to complete final paper in time for 2000 Conference. This paper was directed more at a petro-chem audience, since most mills have Class II, not Class I, areas. There was, however, considerable interest in getting an update on the NEC. Mr. Bennett was unable to present at the 2000 Conference in Atlanta. Rick will report any progress at interim meeting in Orlando.

99.03 Reengineering Maintenance for the Organization of the Future

Sponsor:

Author:

Reviewers: Dave Durocher, Wayne Vinson, Bruce Campbell

Classification: E-2001

Comments: Original author changed jobs and is no longer available to do this paper. Tom Grudkowski has agreed to try to locate a new author and will contact Bruce Campbell regarding this in the next few weeks.

99.06 Evaluation of Motor Impedance Testing

Sponsor: Rick Watkins

Author: Joe Armstrong (Boise Cascade-Jackson)

Reviewers: Burt Judson, Rhonda Banks

Classification: D-2001

Comments: Joe has not done any work on the paper but is still interested in doing it. Rick Watkins will follow-up with him looking for a possible paper at the 2001 conference and will call Bruce Campbell about this in the next few weeks.

99.10 Trends in GUI Design

Sponsor: Bill Polley

Authors: Keith Cockerham

Reviewers: Dave Durocher, Peter Baen, Burt Judson, Laurie Cihlar

Classification: C-2001

Comments: Sue Hall wrote an excellent paper in 1996 on this subject. Burt Judson has indicated that Keith Cockerham will update the information into a new paper for the 2001 conference. We need to target this paper for the Portland conference.

00.04 Why a Lump sum Contract is the Highest Cost Approach

Sponsor: Del Decker

Author: H. Charles Anderson (Harris Group)

Reviewers: Rhonda Banks, John Fagen, Wayne Vinson

Classification: E-2001

Comments: Original author from Bally Electric is no longer able to do the paper. Del agreed to try to find another author, especially one with a mill perspective. Case histories of actual v. estimated cost on mill projects...need for very well defined bills of material, scope, and specifications were stressed. Our fine panel discussion notwithstanding, there is considerable interest in this topic, and we should push to make this happen for 2001.

00.05 NEC Enforcement on Foreign Made Equipment

Sponsor: Rich Carle

Author: None identified as yet

Reviewers:

Classification: E-2001

Comments: Many of the Pulp and Paper Companies have had problems getting foreign vendor supplied equipment approved by the local electrical inspector. The Requirements can vary from state to state. Rich will investigate possible authors and advise.

00.06 Wholesales Power Sales Opportunities for Pulp & Paper Mills(FERC 888)

Sponsor: Russ Thrift

Author: None identified as yet

Reviewers:

Classification: E-2001

Comments: There are opportunities for mills that have excess generation to now sell power to the wholesale market. This can be very profitable for the mill, especially when prices are on the upswing. The regulations regarding retail sales vary greatly state by state. Possibilities for authors include mill energy managers, utility marketing personnel. Larry Menche will also contact a consultant in Alabama. Topics for discussion:

- a) how to go about selling power
- b) examples of successes from mills that have sold power
- c) trends in regulations

00.07 Changes in the NEC for Pulp and Paper Applications

Sponsor: Larry Menche

Author: Fred Harwell (EC & M Magazine)

Reviewers:

Classification: E-2001

Comments: Discussion of how changes in the NEC may affect the pulp & paper industry. Mr. Hartwell wrote an article in EC & M and it was felt that he could well provide a tutorial on the subject. It was felt that the 2002 or 2003 conference (after revisions to NEC in 2002) would be more appropriate timing.

00.08 Carbon Brush Performance and Application in the Pulp/Paper Environment

Sponsor: Wayne Vinson

Author: Roland Roberge

Reviewers: Del Decker, Bill Polley, Burt Judson

Classification: C-2001

Comments: Roland has a rough draft nearly finished and is committed to doing this paper for the 2001 conference.

00.09 Brushless Switch Reluctance Technology Update

Sponsor: Tom Grudkowski

Author:

Reviewers: Roland Roberge, Robert Montgomery

Classification: E-2001

Comments: Tom has agreed to locate an author for this paper, which will cover an approximate hp range of 100 to 1000.

00.10 Rotor Designs for Induction Motors

Sponsor: Bruce Campbell

Authors: Bill Finley and Mark Hodowanec

Reviewers: Tom Grudkowski, Rory Johnson, Rhonda Banks

Classification: B-2001

Comments: Abstract is received, and paper is 80% complete. Topics will include application considerations in the selection of aluminum v. copper rotors, as well as design and construction characteristics of each type of rotor. This paper should be definite for the 2001 conference.

00.11 D.C. Motor Maintenance

Sponsor: Roland Roberge

Author: Gary Lozowski

Reviewers: Del Decker, Wayne Vinson, Robert Montgomery

Classification: C-2001

Comments: Paper is approximately 2/3 finished and should be a go for 2001. No abstract received yet, but rough draft should be available at October meeting

00.12 Corrosion in Control Room Environments

Sponsor: Robert Montgomery

Author: Tom Shelton

Reviewers: Rory Johnson, Rhonda Banks

Classification: D-2001

Comments: Monitoring of corrosion problems in control rooms in the pulp & paper industry will be the topic. Abstract needed.

00.13 Case History: Turbine-Generator Failure

Sponsor: Laurie Cihlar

Author: Mark Woodman

Reviewers: Rhonda Banks, Rory Johnson

Classification: D-2001

Comments: A case study of a generator rotor retaining ring failure. Abstract needed. Mark will try to obtain mill approval and have a rough draft ready for the interim meeting. This paper has a very good chance of being ready for the 2001 conference.

00.14 Attracting engineering Talent to the Pulp & Paper Industry

Sponsor: Larry Menche

Author:

Reviewers:

APPENDIX C

EMMC SUBCOMMITTEE

Classification: E-2001

Comments: A timely topic (one which was addressed in 1999's keynote address). Larry suggested the topic and will attempt to identify an author.

APPENDIX D PDS SUBCOMMITTEE

**IEEE Pulp and Paper Conference
Power Distribution Systems Subcommittee
June 19, 2000
Meeting Minutes**

Members Present:

Robert Adams	Clifford Normand, Chairman
Robert Beltz	Bud Palmer
Charles Canty	Elton Parker
Tim Crnko	Larry Pryor
Don Deyo	SP Reddy
Douglas Frushour	Richard Schaefer
Bucky Hammonds	Ted Sexton
Warren Henson	Ron Simpson
Shoaib Kahn	Ray Smith
John Levine	Charlie Toole
Jamie Lyles	Bill Vilcheck
George Matto	Charles Wood
Robert Moore	Alex Wu
Joe Morlino	

Total: 27

Excused Members:

Stephen Dyrnes	Ed Reid
Claude Hudson	Jim Simpson
Vernon Newbill	

Total: 7

Guests

J.C. Das	Donald Ray
Tom Grudkowsk	Glenn Smith
Zafer Mohiuddin, former PDS member	Patrick Whatley

Total: 5

Unexcused Absences:

Melvin Bernard	Jim Poole
Terence Branch	Prem Tagra
Darrell Broussard	Paul Tsou
Robert Burns	Del Ventruella
David Burrow	
TC Chao	
Pat Dooley	
Richard Kramer	
Bal Kulkarni	
Indra Madan	
Bill Nolley	

Total: 15

Welcome:

All attendees introduced themselves.

List of members was circulated for updating and attendance.

Paper grader for this session is Bill Vilcheck. Robert Beltz was his backup.

Reviewed the responsibility of the paper sponsors.

Shoaib Kahn offered a tutorial for next June.

Lanny Floyd, Dupont, discussed the Electrical Safety Workshop. The next workshop will be in Toronto, January 24-26, 2001, in Toronto. The Petroleum and Chemical Industry Committee Safety Subcommittee sponsor the workshop. Additional information can be obtained from <http://www.ieee-pcic.org/safety.htm>.

Roger Jones passed out information on a proposed change to the NEC 430-102(b) eliminating the exemption for local disconnects. The IEEE has taken a stand against the proposed change. A copy of the pass-out is attached to the cover letter.

Cliff Normand discussed the status of the I&CPS Working Group on generator grounding.

Jamie Lyles and Russ Ford volunteered to handle the lights for one technical session.

Papers for the conference from PDS were:

- Short-circuit Studies and Coordination Studies (What, Why, and When are They Needed).
Author: **Bruce L. Graves**
- Power System Data Base Management.
Author: **Ron Simpson** and **John Levine**
- Digital Excitation System Provides Enhanced Tuning over Analog Systems
Author: **Richard Schaefer**
- Standards and Ratings for the Application of Molded Case, Insulated Case, and Power Circuit Breakers
Author: **Dave Roybal**
- Application Considerations for High Resistance Ground Retrofits in a Pulp & Paper Mill
Author: **Bill Vilcheck**, Ian Peacock, and Bob Beltz
- Evaluating Medium Voltage Cable Splices and Terminations
Author: Bill Taylor and Glenn Morrison
- Reducing the Damaging Effects of Lightning Caused Voltage Fluctuations and Power Outages
Author: **John Holmquist** and **Roger Jones**

The following papers were deleted since the last meeting:

- Witness testing of distribution and power transformers.
- Power outage at Lake Superior Paper Industries.
- Acceptance and Maintenance Testing of Medium Voltage Cable, an Update. Another sub-committee will handle this item.
- Tutorial on the 2002 NEC Changes. Another sub-committee will handle this item.

APPENDIX D**PDS SUBCOMMITTEE**

- Application of a used 16,000HP Synchronous motor and 20MVA transformer to a new Pulping Refiner.

List of proposed papers is attached. There was a warning that IAS has a limit of 8 pages for any paper they publish. There is a fee per page for any additional pages. PPIC does not have such a rule.

Adjourn

PD minutes June 2000.doc

APPENDIX E TSSC SUBCOMMITTEE

Report not available.

APPENDIX F DCS SUBCOMMITTEE

**MINUTES OF THE DCS SUBCOMMITTEE MEETING
ATLANTA, GA
JUNE 19, 2000**

Welcome and Introductions

Del Seaver called the meeting to order at 8:00 am. The members of the committee introduced themselves. There were 36 present, 4 excused absences, 12 unexcused, and 6 guests.

The mailing list was circulated and used as the attendance sheet. Those present were asked to initial the list next to their name and make any corrections to the list, specifically the e-mail address.

Special Topic Discussed

Del Seaver noted that the position of Secretary is not an official position within the subcommittees, but we have used it out of necessity for the last several years. He noted that it is very difficult to conduct the meeting, and take the notes of meeting at the same time. He proposed that the position become a permanent position on the committee. Some discussion followed, including the suggestion by Duncan Rhodes that an outline of specific responsibilities be created. Since IEEE doesn't recognize the position, it was concluded that the position should be established unofficially and the responsibilities would be whatever the committee chairman felt was needed.

A vote was taken, and the proposal was approved unanimously. Bob Olsson will serve as the Secretary.

Old Business

The minutes of the Interim Meeting in Atlanta October 13, 1999 were read by Bob Olsson and approved.

New Business

For Session 4 on Thursday afternoon June 22, volunteers were needed for the lights. Walt Jones and Mark Zawadzki will handle the job.

The subject of low mill participation was discussed. Del Seaver asked that we all make an attempt to increase the participation by personally inviting new mill personnel to the meeting.

There is a piece of legislation in front of the NEC which could have a large impact on paper mills and other industrial environments. It involves the installation of local disconnects on all motors for safety reasons. There is opposition to this for many reasons. Members were asked to pick-up a leaflet describing the legislation and the correct way to voice an opinion. Everyone's input was requested.

Paper Review

A total of 23 papers were discussed. The net result was a total of one A paper, five B papers, ten C papers, two D papers, and five E papers. This is a thin schedule for the 2001 conference. The sponsors of the B and C papers will need to make sure that a satisfactory number of authors complete their work for the 2001 conference to be a success.

The following abstracts or papers were turned in or distributed to the reviewers in the meeting.

#2000-07	Motor Bearing Systems	Abstract
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APPENDIX E**TSSC SUBCOMMITTEE**

#2001-03	A Motor Repair Specification for the Forest Products Industry	Abstract
#2001-06	Comparison Testing of IEEE Standard 841 Motors	Abstract

A panel discussion is proposed for the 2001 conference titled Mill Wiring Practices. Participants are each required to have a position paper. Participants and their area of discussion are: Pat Link, Power cabling including feeders and motors; Dick Kane, Drive master, Operator Panels, shielding, tachometers, printers and signal common; Mark Zawadzki, Drive to motor. Ron Meihofner will contribute information on instrumentation wiring; Gary Zibinski was volunteered by Pete Werner, area to be defined. Reviewers of the position papers are Warren Hopper and Del Seaver.

Duncan Rhodes has agreed to be the paper reviewer again for 2001. Mark Weaver will serve as alternate.

Del Seaver adjourned the meeting at 11:40 a

APPENDIX F

DCS SUBCOMMITTEE

THE FOLLOWING PAPERS HAVE BEEN REMOVED FROM CONSIDERATION

Paper No: ~~99-13~~ **Conference:** ~~1999-B~~

Title ~~Lighting Phenomena~~

Sponsor: ~~Jim Rooks~~ **Reviewers:** ~~John Thompson~~
~~Bob Morse~~

Authors: ~~John Holmquist~~ ~~Mark Zawadzki~~
~~Duncan Rhodes~~

Status: (Oct. 99) Cancelled, Will be sponsored by another Subcommittee.

Paper No: ~~99-03~~ **Conference:** ~~2000-C~~

Title ~~Application of IEC Low Voltage Motor Protection and Control Equipment~~

Sponsor: ~~Dave Rollay~~ **Reviewers:** ~~John Holmquist~~
~~John Key~~

Authors: ~~Terry Gallager~~
~~Rich Carle~~

Status: (Oct. 99) Paper Cancelled.
(June 99) Found Authors.

APPENDIX F

DCS SUBCOMMITTEE

THE FOLLOWING PAPERS WILL BE CONSIDERED FOR 2001 AND LATER

Paper No:	96-10	Conference:	2001-C
Title	Paper Machine E-Stop Case History		
Sponsor:	J. Alan Lowe	Reviewers:	John Thompson Richard Kane
Authors:	Walter Jones		B. Graves Mark Weaver Philip Fransen
Status:	(Oct. 99) Scheduled for 2000 Per Alan and Walt, Research done, Rough Draft by Nov. 99 (June 99) Not finished – A paper for 2000 (June 23, 2000) Walt is committed to have Draft completed by Interim Meeting.		
<hr/>			
Paper No:	96-15	Conference:	2002-E
Title	Electric Welder Practice in Paper Mills		
Sponsor:	Dave Rollay	Reviewers:	D. Ray Crane Duncan Rhodes
Authors:			Walt Jones Patrick Link John Worsham
Status:	(Oct.99) Changed Sponsor, This paper has been on list for many years. (June 99) Change title to “Practices or Guidelines” ? (June 23, 2000) Robert Bengston and Mark Zawadzki are withdrawn as authors. Ray Crane has data, Mike Eickenberry at GB Pkging is to be contacted for suggested authors. Changed to 2002.		
<hr/>			
Paper No:	97-02	Conference:	2001-C
Title	AC Motor Optimization for Unwind Applications		
Sponsor:	Mark Weaver	Reviewers:	Peter Werner Robert Bengston Walt Jones
Authors:	Steve Evon Duncan Rhodes Burt Judson		J. Alan Lowe Mark Zawadzki Bob Morse
Status:	(Oct. 99) Changed to 2001 conf. (June 99) Paper not started. (June 23, 2000) Added Duncan Rhodes and Burt Judson as co-authors, Mark Weaver as Sponsor. Rough Draft will be ready for Interim.		

APPENDIX F**DCS SUBCOMMITTEE**

Paper No:	97-07	Conference:	2001-C
Title	System Tuning concepts for a Sectional paper machine Drive, A Case History		
Sponsor:	Henry Wachter	Reviewers:	J. Alan Lowe Patrick Link
Authors:	Philip Fransen		Walt Jones Duncan Rhodes Robert Bengston
Status:	(Oct.99) Format Changed, Theory, Case Study; To Present in 2000 and Rome (June 99) Looks good for Rome. (June 23, 2000) Paper will not be presented at Rome. Rough draft will be available at Interim.		
<hr/>			
Paper No:	98-13	Conference:	2001-C
Title	Case History of TMP Refiner Synchronous Motors Insulation Failures		
Sponsor:	Auston Bonnett	Reviewers:	Mark Weaver Gene Davis
Authors:	Phil Fransen Larry Logan Don McDonald		Bruce Graves Duncan Rhodes Preston Jackson
Status:	(Oct. 99) Mill Monitoring Data, will be done by 11/8/99 (June 23, 2000) Changed from 2000-B to 2001-C. Rough draft will be ready for Interim meeting		
<hr/>			
Paper No:	99-02	Conference:	2001-E
Title	Synchronous Motor Field Protection and Control Applications		
Sponsor:	Bruce Graves	Reviewers:	Mark Weaver Hank Wachter John Kay
Authors:	Doug Frushour		
Status:	(Oct. 99) No updated information, Changed to 2001 (June 99) Need to check status with Sponsor. (June 23, 2000) No information for update. Del Seaver to contact author. Sponsor changed from Brian Akelay to Bruce Graves. Changed paper from 2001- D tp 2001-E.		
<hr/>			
Paper No:	99-10	Conference:	2001-D
Title	Design Criteria for Power Transformer for Excitation System		
Sponsor:	John Holmquist	Reviewers:	Walt Jones John Kay
Authors:	Rich Schaefer		Jim Rooks
Status:	(Oct. 99) Rescheduled for 2001 (June 99) Abstract at Interim (June 23, 2000) Abstract and Rough Draft committed for Interim.		
<hr/>			
Paper No:	99-14	Conference:	2001-C
Title	Reel Quality and Lineal Footage Tracking System		
Sponsor:	Duncan Rh odes	Reviewers:	Pat McNulty Walt Jones
Author:	John R. Thompson		Philip Fransen Bob Morse

APPENDIX F**DCS SUBCOMMITTEE**

Status: (Oct. 99) Scheduled for 2000
(June 99) System start-up September, 99
(June 23, 2000) Changed from 2000-A to 2001-C

Pete Werner

Paper No: 2000-01 (Rome) **Conference:** 2001-B

Title Application of an Integrated Turbine Generator Control System

Sponsor: Dave Rollay **Reviewers:** Bob Morse
Bob Giese

Authors: Mark Weaver John Holmquist
Dave Brown
Steve Hilder

Status: (Oct. 99) Rough Draft to be done by end of November
(June 99) Abstract given at meeting
(June 23, 2000) Changed from 2000-B to 2001-B. Paper will be presented at Rome and will be presented at 2001 Conference.

Paper No: 2000-03 **Conference:** 2001-C

Title The Effects of Soft Covered Rolls being Nipped and the Resulting Effects on Roll Regulation

Sponsor: Alan Lowe **Reviewers:** Philip Fransen
Duncan Rhodes

Authors: Walt Jones Bob Morse
Pete Werner

Status: (Oct. 99) Rough Draft will be ready by 11/8/99 John R. Thompson
(June 99) Abstract given at meeting Dick Kane
(June 23, 2000) Changed from 2000-B to 2001-C. Walt is to redistribute Abstract. Draft will be ready for Interim meeting.

Paper No: 2000-06 **Conference:** 2001-C

Title Effects of Power Transmission Components on AC Motor Bearing Currents

Sponsor: Duncan Rhodes **Reviewers:** Austin Bonnett
Mark Zawadzki

Authors: Russ Kerkman Pat Link
Gary Skibinski John Bentley
Mike Loth Alan Lowe
John Smith

Status: (Oct. 99) No change in status
(June 99) First draft by October meeting
(June 23, 2000) Changed from 2000-C to 2001-C. Abstract and Rough draft promised for Interim meeting.

Paper No: 2000-07 **Conference:** 2001-B

Title AC Motor Bearing Systems

Sponsor: John Holmquist **Reviewers:** Bob Morse
Walt Jones

Authors: Tim Albers Dan Turney
Austin Bonnett Ron Mehofer
Pat Link

Status: (Oct. 99) Changed to 2001
(June 99) Rough draft completed.

APPENDIX F**DCS SUBCOMMITTEE**

Paper No: 2001-05 **Conference:** 2001-E

Title Laser Ranging to ??????????????

Sponsor: Jim Rooks **Reviewers:**

Authors: John Holmquist

Status: (June 23, 2000) There is a patent pending. Reviewers will be added at Interim.

Paper No: 2001-06 **Conference:** 2001- B

Title Comparison Testing of IEEE Standard 841 Motors

Sponsor: Austin Bonnett **Reviewers:** Tim Albers
John Bentley

Authors: Alan K. Wallace Pat Link
John R. Holmquist Duncan Rhodes
James A. Rooks Erwin Von der Hey

Status: (June 23, 2000) Abstract received and distributed.

Paper No: 2001-07 **Conference:** 2001 - A

Title Paper Machine Drive Upgrade Completed During Washups

Sponsor: Duncan Rhodes **Reviewers:** Ron Meihofner
Mark Weaver

Authors: Dave Zimmer John R. Thompson
Dick Kane

Status: (June 23, 2000) Paper was presented at TAPPI this year.

Paper No: 2001-08 **Conference:** 2001-B

Title Starting and Setting Procedures on Electric Lineshaft Drives

Sponsor: John Bentley **Reviewers:** Mark Weaver
Bob Morse

Authors: Bob Lorenz Walt Jones
Anibal Vallenzuella Alan Lowe
Ron Meihofner
Del Seaver

Status: (June 23, 2000) This is a follow-up paper from 2000-05.

Paper No: 2001-09 **Conference:** 2001-C

Title Calibration Issues for Segmented Tension Transducer Rolls

Sponsor: Mark Weaver **Reviewers:** Pat Link
Dick Kane

Authors: Pete Werner John Bentley
Dave Mintzloff
John R. Thompson

APPENDIX F**DCS SUBCOMMITTEE**

Mark Zawadzki

Status: (June 23, 2000) New paper. Abstract and Rough Draft will be ready for Interim meeting.

Paper No: 2001-10 **Conference:** 2001-C**Title** Reduction of Gear Train Breaks through Drive Tuning**Sponsor:** Duncan Rhodes**Reviewers:** Pat Link
John Bentley**Authors:** Jim KlowPhilip Fransen
Pete Werner**Status:** (June 23, 2000) New paper. Abstract and Rough Draft will be ready for Interim meeting.

Paper No: 2001-11 PANEL **Conference:** 2001- D**Title** Preventative Maintenance Practices – Monitoring Results**Sponsor:** Duncan Rhodes**Reviewers:****Panelists:** Pat Link
Dick Kane
Mark Zawadzki**Status:** (June 23, 2000)

Paper No: 2001-12 **Conference:** 2001-C**Title** Case History – Design Considerations for Drive System Installation**Sponsor:** John Holmquist**Reviewers:** Pat Link
Walt Jones
Dave Mintzloff
Mark Weaver
Alan Lowe
Bob Morse**Authors:** Warren Hopper**Status:** (June 23, 2000) New paper

Paper No: 2002-01 **Conference:** 2002-D**Title** Proper Drive Installation for Adjustable Speed Drives**Sponsor:** John Bentley**Reviewers:** Erwin Van der Hey
Warren Hopper
Duncan Rhodes
John Kay
Dave Mintzloff**Authors:** Pat Link**Status:** (June 23, 2000) New paper.

APPENDIX G CBS SUBCOMMITTEE

COMPUTER BASED SYSTEMS SUBCOMMITTEE

MINUTES OF MEETING

Meeting Date: June 19, 2000

Recorded by: John C. Thompson Cutler-Hammer

Members Present: Joe Armstrong Boise Cascade Corporation
Mike Jhaveri Cerestar USA, Inc.
Blake Lloyd Iris Power Engineering, Inc.
Larry Thomas Weyerhaeuser Company

Members from another subcommittee: Steve Pittman Potlatch Pulp & Paper
Roger Jones Weyerhaeuser Company

Visitors: Brad Semler Westvaco

Excused Absences: Janet Flores Rockwell Automation
Stan Merritt Merritt & Associates, Inc
Reno Tonsi Rockwell Automation
John Worsham Smurfit-Stone Container Corp.

Distribution: Subcommittee Members, Guests

General

Minutes of last meeting were accepted.

Despite our small numbers, we continue to have good discussion and generated a number of new paper ideas. A paper sponsored by the Subcommittee won the Prize Paper award at the 1999 Conference. Thanks for all your help

2001 Conference Papers

The October Interim Meeting will be held this year on the 22nd and 23rd in Orlando at the Hyatt.

The 2001 Conference will be held on June 18 through 22 in Portland, OR at the Downtown Marriott Hotel. The Conference is being held the same month the city holds its Rose Festival.

APPENDIX G**CBS SUBCOMMITTEE**

The Subcommittee believes that it has two potential papers for the Conference. See attached spreadsheet for Sponsor and Reviewer assignments.

We have a paper on the program for the National IAS Conference in Rome Italy. The paper is titled "Use of Integrated Hybrid Control in a Semi-Chemical/Mechanical Pulping Process".

Janet Flores has agreed to be the Primary Paper Grader, and John Thompson will act as backup.

Other Business

Roger Jones requested we revise our paper numbering system. Other Subcommittees are doing the same thing, leading to confusion with papers having the same reference number. From now on all paper numbers generated by our Subcommittee will be preceded by the letter "C".

The Subcommittee was given a copy of an email from Mike Glenn detailing a Proposed Change to NEC Article 430-102(b). It would require a motor disconnecting means located in sight of every motor. This proposal has been accepted by the NEC Code Panel 11 and will become law unless comments to the contrary are submitted to the NFPA no later than 10/27/2000. There was a lengthy discussion on what impact this would have on pulp and paper facilities. The final decision and our response to this change were reached in the General Committee Meeting and will be detailed in those minutes.

Respectfully submitted,

John C. Thompson
CBS Subcommittee Chairman

attachments: CBS_Papers_Update_00.xls
CBS_Attendance_00.xls

APPENDIX H MEMBERSHIP REPORT

MEMBERSHIP REPORT
IEEE PULP & PAPER INDUSTRY COMMITTEE
ANNUAL MEETING
JUNE 19, 2000

Our current committee membership is 131. Since the interim meeting in October we have had two new members, four resignations and ten members dropped for lack of participation. There are ten applications for membership pending.

New members (2):

Jasper Parke
Anibal Valenzuela

Resignations (4):

Jay Banerjee (correction to roster for earlier resignation)
Robert Cotton
John T. Kay
Tom Shearer

Dropped (10):

Kirk Armintor
Brian Kochan
Phung Le
Indra Madan
Joe Miller
Zafer Mohiuddin
Dick Morrison
Jim Poole
Michael Riverin
Chand Tailor

Report submitted by Alan Lowe, Membership Chairman.

APPENDIX H

MEMBERSHIP REPORT

	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00
	A/I	A/I	A/I	A/I	A/I	A/I	A/I	A/I	A/I	A/I	A/I	A/I	A/I	A/I	A/I	A/I	A/I	A/I	A/I
Robert Adams																		X/X	X/
Tim Albers																			X/
Joe Armstrong												O/E	O/E	X/X	X/E	X/X	X/X	E/O	X/
Peter Baen																/X	O/X	X/X	X/
Ronda Banks														X/E	O/X	X/X	X/X	O/X	E/
Robert Bengston														X/X	X/X	E/O	O/O	O/O	O/
John Bentley			X/E	X/X	X/E	X/X	X/E	X/X	X/X	X/X	X/X	X/X	X/E	X/X	X/X	X/X	X/X	X/E	X/
Melvin Bernard																			O/
Austin Bonnett									X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/
Terry Branch							/E	X/X	X/O	X/E	X/X	X/O	X/O	O/E	E/E	O/E	O/O	O/X	O/
Darrell Broussard																			O/
Ken Bruni					E/X	X/X	X/E	X/X	X/X	X/E	X/E	X/O	X/E	X/O	X/O	E/E	E/O	O/O	E/
Robert Burns																			O/
David Burrow																X/X	O/E	O/O	O/
Ken Butler																X/O	O/O	O/O	X/
Rich Butler																		X/X	X/
Lloyd Cain			X/X	X/X	X/X	X/X	X/E	X/E	X/E	X/E	X/E	X/E	X/O	X/X	X/O	X/E	X/X	X/O	O/
Bruce Campbell								/X	X/E	X/O	X/X	X/X	X/O	X/X	X/X	X/X	X/X	X/X	X/
Tom Campbell																	X/O	X/E	O/
Charlie Canty				X/X	E/E	E/X	E/O	X/X	E/E	X/X	O/X	X/O	E/O	E/X	E/X	X/X	X/E	X/X	X/
Richard Carle														E/E	O/O	O/E	O/E	X/O	X/
Hayes Carter																	-/X	O/O	O/
TC Chao							X/X	X/X	X/X	X/X	O/O	X/X	X/O	X/E	E/X	E/O	O/O	E/E	O/
Stephen Cheek													X/O	X/O	O/O	X/E	O/O	O/O	O/
Laurie Cihlar											/X	X/X	X/X	O/X	O/X	E/E	E/X		X/
Gary Clodfelter																	E/E	E/O	O/
Ray Crane	E/O	X/E	X/E	X/E	X/X	X/X	X/X	X/E	X/E	X/X	X/E	X/E	X/E	X/O	X/O	X/E	X/E	X/X	X/
Tim Crnko																		X/X	X/
Pete Dalpe																		O/O	X/
Jim Daly	X/E	E/E	X/E	X/X	X/E	X/O	X/E	E/X	X/X	X/X	X/E	X/E	X/O	E/X	E/E	X/E	X/O	X/E	X/
Gene Davis, Jr.														/E	X/X	X/X	X/E	E/O	O/
Del Decker											X/O	X/E	O/O	O/O	X/E	E/E	E/E		X/
Don Deyo								/E	X/X	X/X	X/X	X/O	E/X	X/X	E/E	X/E	X/O	X/E	X/
Pat Dooley													X/X	X/X	X/X	X/X	X/X	X/X	O/
Gordon Dover																	X/X	X/X	O/O
David Durocher																	X/X	X/X	X/
Stephen Dyrnes			/E	X/E	X/E	E/X	E/O	E/E	X/E	O/E	X/X	X/E	X/O	O/E	E/E	X/E	X/E	X/E	E/
John Fagen																		X/X	O/
Pete Famighetti							X/O	X/O	X/E	X/X	X/E	X/E	E/E	E/E	E/E	O/O	X/E	O/O	E/
Bob Finke									X/E	X/X	X/X	X/E	E/X	X/O	X/O	X/X	O/O	O/X	X/

APPENDIX H

MEMBERSHIP REPORT

Janet Flores															X/X	X/X	E/X	X/O	E/X	O/
Russ Ford																				X/
Phil Fransen	X/	X/E	X/E	X/E	X/X	X/X	X/E	E/E	X/E	E/O	X/X	O/O	X/E	X/E	X/X	X/X	X/X	E/X	E/X	X/
Bob Fritz	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	E/X	X/O	E/E	X/O	O/E	E/O	O/E	O/O	E/	
Douglas Frushour																	X/X	E/O	O/X	X/
Terry Gallagher																	X/X	X/X	X/E	X/
Bob Giese					/E	X/O	E/E	O/O	X/E	E/E	X/O	E/O	E/E	X/E	X/O	E/O	E/O	X/E	O/	
Mike Glenn	X/X	X/X	X/X	X/X	X/X	X/E	X/E	X/X	X/X	X/X	X/X	E/X	X/O	E/X	X/X	E/X	E/E	X/E	E/	
Bruce Graves			X/X	E/X	X/X	X/X	X/X	X/X	E/E	X/X	E/X	E/O	E/E	X/O	O/X	X/X	E/E	O/X	X/	
Chuck Grucella								/E	X/E	E/X	X/E	X/E	X/E	X/E	E/E	E/O	E/O	O/E	O/	
Tom Grudkowski																	X/O	O/O	X/	
Bucky Hammonds														O/X	X/E	X/O	X/O	O/X	X/	
James Harris																	-/X	O/X	O/	
Warren Henson																		O/X	X/	
John Holmquist					/E	X/E	X/X	X/X	X/E	X/X	X/E	X/X	X/X	X/X	X/X	X/E	X/X	X/X	X/	
Warren Hopper																			X/	
Claude Hudson	X/X	X/E	X/X	X/E	X/E	X/O	E/O	X/O	X/O	X/O	X/X	X/O	X/E	X/O	X/O	E/E	O/O	O/O	E/	
Preston Jackson				O/X	E/X	X/E	X/E	X/E	X/X	X/E	X/X	X/E	X/E	X/X	X/X	X/E	X/O	X/X	X/	
Mike Jhaveri										/O	X/X	O/X	O/E	X/E	X/X	O/X	X/O	X/O	X/	
Rory Johnson		/O	X/X	X/X	X/E	E/O	E/E	X/X	X/O	X/O	X/X	X/O	X/E	X/X	X/O	X/X	X/X	X/X	E/	
Roger Jones						X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/	
Walt Jones	X/X	X/X	X/X	X/E	E/E	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	O/X	X/X	X/X	X/X	X/X	X/	
Robert Jordan																E/E	X/X	X/E	X/X	
Burt Judson	X/E	X/X	X/E	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/	
Dick Kane								/X	X/E	X/E	O/O	O/X	X/E	X/E	X/E	E/E	X/E	O/E	X/	
John A. Kay																X/X	X/X	X/X	X/	
Shoaib Khan								/E	X/O	X/O	X/O	X/O	X/O	X/O	X/E	X/X	X/E	X/E	X/	
Richard Kramer									/O	X/E	X/E	X/O	X/E	E/E	O/E	X/E	O/O	O/		
Neville Laing									/E	E/E	X/E	E/E	X/O	O/E	X/E	E/E	O/E	E/E	O/	
Larry Layman	X/E	X/E	X/X	X/E	X/E	E/E	X/E	X/X	X/E	E/X	X/E	X/X	X/E	X/X	X/O	O/E	X/E	E/O	O/	
John Levine										/X	E/X	X/X	E/X	X/E	O/X	X/X	O/X	X/		
Pat Link											/X	X/E	E/E	X/X	O/X	X/X	X/E	X/		
Blake Lloyd													X/E	X/X	X/X	X/X	X/X	X/		
Alan Lowe						O/E	X/E	X/X	X/X	X/X	X/X	X/X	X/E	X/X	X/X	X/X	X/X	X/		
James Lyles																X/O	O/O	O/O	X/	
Jim Mantooth																	X/X	X/		
George Matto	E/O	X/E	E/E	X/E	E/E	X/E	X/E	X/O	E/E	X/O	O/O	X/O	X/O	E/O	X/E	X/E	O/O	X/E	X/	
Patrick McNulty																X/X	X/X	O/X	X/	
Ron Mehofer	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	E/X	X/X	X/X	X/X	X/X	X/X	E/X	X/X	X/X	X/	
Larry Menche													X/E	X/X	X/O	X/E	E/E	X/X	X/	
Stan Merritt	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	E/E	E/	
David Mintzloff																O/X	O/E	O/E	O/E	
Robert Montgomery																	-/X	X/X	X/	
Bob Moore		/X	X/O	X/X	E/X	X/O	X/O	X/O	X/O	X/O	X/O	X/O	X/O	X/O	X/X	X/O	E/X	O/O	O/X	

APPENDIX H

MEMBERSHIP REPORT

Robert Moore																	X/O	X/O	X/	
Joe Morlino	X/X	X/X	E/E	X/X	X/O	E/X	X/X	X/X	X/X	X/X	X/E	E/E	E/E	E/E	E/O	X/X	X/E	X/E	E/E	X/
Bob Morse	X/X	E/E	X/E	X/E	X/X	X/X	X/E	X/X	X/X	X/X	X/E	X/X	X/X	X/X	X/X	E/X	X/X	X/X	X/E	X/
Vernon Newbill																		X/O	X/X	E/
Frank Newman	X/X	X/X	X/X	X/X	X/X	X/X	X/E	E/E	X/E	X/E	E/X	E/X	X/X	E/E	X/X	X/E	E/E	O/X	X/	
Bill Nolley																		O/O	O/	
Clifford Normand																	X/X	X/X	X/X	X/
Bob Olsson																	X/X	X/X	X/X	X/
Tom Osborne													O/E	X/E	X/X	X/X	X/E	O/O	O/	
Bud Palmer							X/X	O/X	X/X	X/X	X/X	X/X	X/O	E/X	E/X	X/X	O/O	E/X	X/	
Jasper Parke																				O/
Elton Parker	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/
Stephen Pittman															X/X	E/X	X/X	X/X	X/X	X/
Bill Polley	X/X	E/E	E/E	E/E	O/X	X/O	X/O	E/E	E/E	X/O	E/E	X/E	X/E	E/E	X/E	X/X	X/E	E/O	X/	
Phil Poole		/E	X/X	X/E	E/X	X/X	X/X	X/E	X/X	E/E	O/E	O/E	X/E	X/X	E/X	E/E	E/E	E/E	E/	
Mike Poynter												X/E	X/O	X/E	E/E	X/O	X/O	X/O	X/	
Larry Pryor																	X/E	X/E	X/	
SP Reddy	X/X	X/E	X/O	X/X	X/E	X/X	X/X	E/X	X/X	X/X	X/O	X/X	X/X	X/X	X/X	X/E	X/O	X/O	X/	
Gary Reed																				O/
Clayt Reid	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/
Ed Reid									/X	X/X	X/X	X/X	X/E	E/X	E/X	X/X	X/O	O/O	E/	
Duncan Rhodes																	X/E	X/X	X/E	X/
Dwayne Robbins																				O/
Roly Roberge																			-/X	X/
Dave Rollay	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	E/X	X/X	X/	
James Rooks																X/O	X/X	X/O	X/	
Paul Roullier									/X	X/X	X/E	X/X	X/X	X/X	X/X	X/E	X/X	X/E	X/	
Richard Schaefer																			-/E	X/
Del Seaver													/O	X/X	X/O	X/E	X/X	X/		
Ted Sexton								/E	X/E	X/X	X/O	O/O	O/E	X/O	O/O	X/E	X/O	X/		
Bill Sexton																			-/O	O/
Ralph Shead												/O	X/X	X/X	X/X	X/X	X/X	X/		
Jim Simpson																X/X	E/X	X/X	O/O	E/
Ron Simpson				E/X	X/X	X/X	X/X	X/X	X/X	X/X	X/O	X/X	X/X	X/X	X/X	X/E	X/X	X/X	X/	
Ron Sinclair				/X	X/X	X/X	E/E	X/X	X/X	X/E	X/X	E/O	X/O	O/O	O/O	O/O	X/X	E/		
Glenn Smith																				X/
Ray Smith					/X	X/X	X/X	E/E	X/X	X/X	E/X	X/X	X/X	X/X	O/O	X/O	O/O	X/		
Fred Stack																	X/X	O/O	O/	
Malcolm Steeves							E/O	O/X	X/E	O/E	X/E	E/O	X/O	X/E	O/E	X/E	X/E	X/O	X/	
Prem Tagra															/X	X/O	E/X	O/O	O/	
Larry Thomas							E/E	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/	
John R. Thompson	E/E	E/O	X/O	X/X	E/X	X/E	X/O	X/E	X/E	X/X	X/E	X/E	X/E	X/X	X/E	X/X	X/X	X/E	X/	
John C. Thompson																X/X	X/X	X/X	X/	
Russ Thrift							X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/X	X/	

APPENDIX H

MEMBERSHIP REPORT

Sid Ticker										X/E	X/X	O/X	X/X	X/E	X/X	X/O	O/O	O/
Reno Tonsi								/X	X/E	X/E	X/X	X/X	X/E	X/X	X/X	X/O	X/E	E/
Charlie Toole																	X/O	X/
Steven Trussell																		X/
Paul Tsou									/X	X/X	X/X	X/E	X/O	X/O	X/X	E/E	O/O	O/
Anibal Valenzuela																		X/
Del Ventruella													X/E	X/E	O/X	X/X	X/X	O/
Bill Vilcheck																/X	X/X	O/X
Wayne Vinson															O/X	X/X	X/X	X/
Erwin von der Ehe																	X/E	X/E
Hank Wachter										X/O	X/E	X/X	X/X	X/E	X/E	X/X	X/X	E/
Rick Watkins									/X	X/X	X/X	X/O	X/X	E/X	X/X	X/E	O/X	O/
Mark Weaver				X/X	X/E	E/X	E/X	X/X	X/E	X/E	X/X	X/E	X/X	X/X	E/E	X/X	X/E	X/
Pete Werner													X/O	X/X	X/O	E/E	X/X	X/
Jim Williams	E/E	O/O	X/X	X/E	X/X	X/X	X/X	E/O	X/E	E/E	X/E	E/O	E/O	X/O	E/E	E/O	O/O	O/
Charles Wood								E/X	E/X	E/X	E/O	O/X	E/X	E/X	O/O	X/X	E/X	X/
John Worsham																	X/X	E/
Alex Wu		E/X	X/X	X/X	E/X	E/X	X/X	X/E	X/O	X/E	X/X	X/X	X/O	X/X	X/X	X/X	X/O	X/
Mark Zawadzki																/X	E/X	X/

APPENDIX I PAPER AWARDS AND PUBLICATIONS**INDUSTRY APPLICATIONS SOCIETY**

Pulp & Paper Industry Committee

Special Recognition

Technical Papers Selected for Publication by IEEE/IAS from 1999 Conference in Seattle

IAS Magazine

- ❖ *“New Dielectric Coolant Concepts for Distribution and Power Transformers”*
Author: C. Patrick McShane
- ❖ *“Desinging Secure Networks for Process Control”*
Author: Eric Byres
- ❖ *“Intelligent Motors Moving to the Forefront of Predictive Maintenance”*
Authors: Matthew M. O’Kane and Michael J. Sander
- ❖ *“Application Benefits of An Open DevicNet Control System in the Forest Products Industry”*
Author: Satoshi Kino
- ❖ *“Proper Application of Motors Operated on Adjustable Frequency Control”*
Author: Mark M. Hodowanec
- ❖ *“NEC Requirements of Isolated Safety Ground for Medium Voltage Mobile or Portable Equipment in Industrial Environments”*
Authors: William F. Robertson and J. C. Das

Industry Application Transactions

- ❖ *“The Impact That Voltage and Frequency Variations Have on AC Induction Motor Performance and Life in Accordance with NEMA MG-1 Standards”*
Author: Austin H. Bonnett
- ❖ *“Investigation of Electric Drive System Response to Lightning Related Voltage Sags”*
Authors: Yuexin Yan, Alex Wu, and Tom Blackburn
- ❖ *“Variable Frequency Drive Principles and Practices (Above NEMA) AC Motors for Variable Frequency Application”*
Authors: Stephen T. Evon and Bryan Oakes
- ❖ *“Partial Discharge Theory and Application to Electrical Systems”*
Authors: Gabe Paoletti and Alex Golubev

Technical Paper Award Winners from 1999 Conference in Seattle

❖ 1st Place Paper

“Designing Secure Networks for Process Control”

Author: Eric Byres, Artemis Industrial Networking

❖ 2nd Place Paper

“The Impact That Voltage and Frequency Variations Have on AC Induction Motor Performance and Life In Accordance With NEMA MG1 Standards”

Author: Austin Bonnett, Retired-US Electrical Motors

❖ Best Mill Paper

“Application and Benefits of an Open DeviceNet Control System in the Forest Products Industry”

Author: Satoshi Kino, Weyerhaeuser Corporation

Paper Reviewers for 2000 Conference in Atlanta

❖ EMMC Subcommittee: Robert Montgomery

❖ PDS Subcommittee: Bill Vilcheck

❖ TSSC Subcommittee: Ralph Shead

❖ DCS Subcommittee: Duncan Rhodes

❖ CBS Subcommittee: Blake Lloyd

APPENDIX J

SCC #18 FORM AND LETTER

APPENDIX J SCC #18 LETTER

June 16, 2000
 From: Michael V. Glenn (PPIC Representative to SSC#18 & NEC)
 To: PPIC

Subject: **Urgent Notification of Proposed Change to NEC Article 430-102(b).**

Dear PPIC and All Concerned:

There has been a proposal submitted that would require a motor disconnecting means located in sight of every motor. This proposal was accepted by NEC Code Panel 11 and will become law unless comments to the contrary are submitted to the NFPA no later than 10/27/2000. The accepted proposal is as follows:

Log #4074
 NEC-P11

11-68-(430-102(b)):
SUBMITTER: Michael I. Callanan
 IBEW

RECOMMENDATION:

Add a second sentence to read:

"The disconnecting means required in accordance with 430-102(a) may also serve as the disconnecting means for the motor if it is located in sight from the motor location and the driven machinery location."

Remove the exception in 430-102(b).

SUBSTANTIATION:

Current wording allows for the motor disconnecting means to be an unlimited distance from the motor as long as the disconnecting means for the controller can be locked in the open position. There are two serious safety issues. When the distance is excessive, workers attempt to work the equipment "hot," rather than walk the distance four times. The other issue concerns the worker who gets "hung up" and the disconnecting means is not within sight. This proposal will reduce accidental injuries and death, at very minor incremental cost to the owner.

Exception 430-102(b) reads as follows:

Exception: A disconnecting means, in addition to the controller disconnecting means as required in accordance with Section 430-102(a), shall not be required for the motor where the disconnecting means for the controller is individually capable of being locked in the open position.

The deletion of this exemption will require the installation of a disconnecting means in sight of every motor you have in your mill. The IEEE voted against this change. However, there were enough panel votes to carry this proposal into the 2002 code unless it is challenged in the comment stage. I intend to make the following comment and suggest that if you are against this action that you make a comment as well.

Submitter: Michael V. Glenn, Longview Fibre Company

COMMENT ON PROPOSAL 11-68-(430-102(b)) Log #4074:

RECOMMENDATION: Reconsider Panel Action and reject the proposal

SUBSTANTIATION: The originator of this proposal did not supply any substantiation of any accidents caused by using the disconnecting means required in accordance with 430-120(a) for electrical safety lockout. The originator's statement that workers might attempt to work the equipment "hot" rather than walk an excessive distance is vague, a generality, and a violation of law. The originator's scenario substantiation stating that a worker who gets "hung up" in a piece of machinery could use a disconnect as a means of getting out of trouble clearly shows a lack of understanding of all safety procedures, NPFA 70E requirements, and the Federal Law Regarding lockouts. OSHA Regulations (Standards - 20 CFR) "The control of hazardous energy (lockout/tagout), - 1910.147 established the

minimum requirement for safety lockout and tagout of all energy sources including electrical. Both OSHA and NPFA 70E presently provide for the correct and safe procedures to lock or tag electrical equipment.

Using the disconnecting means required in 430-120(a) is a proven safe method of lock out. This is substantiated by many safe years with no accidents. Only when the law is violated has there been a problem. The submitter's statement that this change would be "at a very minor incremental cost to the owner" is incorrect. At our industrial facility we have approximately 8,000 AC and DC motors. We purchase the latest type of motor control centers with lockable devices just for the purpose of lockout and tagout. Installing disconnects in the field for every motor will increase building space and size requirements to provide the necessary space that does not interfere with operations but yet in sight of the motor. This proposed requirement has a very significant impact not only on cost, but also in real estate required. I realize that cost is no substitute for safety. However, in this particular case the additional cost is not warranted when there is a proven safe means of lockout.

There are many good reasons to use the disconnect required in 430-102(a) as the lockout device rather than a disconnect within site of the motor. The controller disconnect is a proven safe lockout means. The controller disconnect allows for determining if the controller is open prior to opening the disconnect. The disconnect at the controller is where most everyone would go to check the status of the equipment. The controller control circuit condition can be observed at the controller. It would be unwise to open or close a disconnect at the motor without knowing the state of the controller.

I strongly request the panel reconsider its action and reject this proposal to remove exemption 430-102(b) based on inadequate substantiation supporting this requirement. The need for a field disconnect within sight of the motor should be left to the need of the user and not dictated by code.

As I have already stated, the IEEE SSC#18 voted against this proposal. If you want to make a formal comment about this proposal to the NFPA and CMP11 you can do so by following the instructions and using the form in the back of the 1999 NFPA-70(NEC), or you can go to the NFPA WEB page at www.nfpa.org, or you can write or call:

NFPA
1 Batterymarch Park
P.O. Box 9101
Quincy, MA 02269-9101
Main Switchboard: (617) 770-3000
Fax: (617) 770-0700

Yours truly,



Mike Glenn
PPIC, TSSC, NEC Code Panel 15, SSC#18

APPENDIX J

SCC #18 FORM AND LETTER



June 27, 2000

NFPA
1 Batterymarch Park
P.O. Box 9101
Quincy, MA 02269-9101

Ronald H. Simpson
Secretary
IEEE/IAS Pulp & Paper Industry Committee
6465 East Johns Crossing
Duluth, GA 30097

Reference: Log#4074, NEC-P11, 11-68-(430-102(b))

Dear Sir or Madam:

This letter is to inform you of the position of the PPIC with respect to the proposed removal of exception 430-102(b) from the NEC. The PPIC is opposed to the removal of this exception for industrial plants.

The originator of this proposal did not supply any substantiation of any accidents caused by using the disconnecting means required in accordance with 430-120(a) for electrical safety lockout. The originator's statement that workers might attempt to work the equipment "hot" rather than walk an excessive distance is vague, a generality, and a violation of law. The originator's substantiation stating that a worker who gets "hung up" in a piece of machinery could use a disconnect as a means of getting out of trouble clearly shows a lack of understanding of all safety procedures, NFPA 70E requirements, and the Federal Law Regarding lockouts. OSHA Regulations (Standards – 20 CFR) "The Control of Hazardous Energy (Lockout/Tag out)-1910.147" established the minimum requirement for safety lockout and tag out of all energy sources including electrical. Both OSHA and NFPA 70E presently provide for the correct and safe procedures to lock or tag electrical equipment.

Using the disconnect means required in 430-120(a) is a proven safe method of lock out. This is substantiated by many safe years with no accidents. Only when the law is violated has there been a problem. The submitter's statement that this change would be "at a very minor cost to the owner" is incorrect. The substantial cost is not warranted when there is a proven safe means of lock out.

We strongly recommend the panel reconsider its action and reject this proposal to remove exemption 430-120(b) based on inadequate substantiation supporting this requirement. The need for a disconnect in site of the motor should be left to the need of the user and not directed by code.

Sincerely,

Ronald H. Simpson
Secretary
Pulp & Paper Industry Committee
IEEE/IAS