# IEEE New South Wales SECTION
# 2006 Section Report

Submitted to R10 Conference, March 2007.

Prepared by:
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## PART A - SECTION SUMMARY

### A.1 Executive Summary

- Refer to Appendix 1, complete events calendar for 2006.

### A.2 Financial Report

- Refer to Appendix 2.

### A.3 List of Section Officer and Executive Committee Members

| | | |
|---|---|---|
| Ananda Sanagavarapu | AP/MTT Chapter Vice Chair | M03519972 |
| Anthony Zaglas | PES Chapter Secretary | |
| Bruce Poon | Membership Development | SM8195588 |
| David Burger | **Section Vice Chair**, AP/MTT Chapter Secretary, Comsig Chapter Secretary | SM7425952 |
| David Dapeng Tien | **Section Secretary** | M00496430 |
| Eddie Kui Pun Fong | Circuit Editor | M04333191 |
| Faz Rahman | Power Elec/Indust. Elec/Indust. Applic Chapter Chair | M7822828 |
| Graeme Gwilliam | **Section Chair**/Power Engineering Chapter Chair | SM7233935 |
| Graham Town | Chair AP/MTT Chapter | M8365207 |
| Ian Boyd | **Section Treasurer** | M41390105 |
| Jim Vasseleu | Awards and Recognition/Life Members | LSM05968193 |
| John Robinson | PES Chapter Treasurer | M06377295 |
| Karu Esselle | Educational Activities | SM2461861 |
| Lakshmi Narasimhan | Committee | M8934341 |
| Ramutis Zakarevicius | Historian | SM1652619 |
| Rob Menegon | Webmaster | M40253959 |

[1] The IEEE NSW SECTION – Chair 2006 had formally requested that I do not prepare this report, as I only attended 8 of the 11 Section meetings throughout 2006 due to illness of my wife. The information presented here is obtained from meeting minutes and reports tabled by Chapter Chairs.

| | | |
|---|---|---|
| Sam Reisenfeld | Comms/SigProc Chapter Chair | M05540083 |
| Walter Lachs | Committee | F07517295 |

# PART B - ORGANIZATIONAL ACTIVITIES

## B.1 Membership Development Programs

- Evidence of retention of members, refer to Appendix 3.
- GOLD and Infirmity Group Activity – no activity and no committee for Affinity groups, noting that a two events by the communications / Signal Processing chapter in NSW were promoted to GOLD members, and reported as GOLD functions given the graduate status of the Attendees.

## B.3 Students Activities

- Active Student Branches activity – Only University of New South Wales appear to have an active committee and representation at the section level.
- Recruitment of student members – The section still has an open promotion of 200 free student memberships, but none occurred under this sponsorship in 2006, as there appeared no way this could be implemented.
- Student paper contest – Not implemented in 2006.

## B.4 E-mail and Newsletter Activities, Home Page

- Number of hard print Newsletters – IEEE NSW SECTION issued one, issued in July 2006 to all members.
- Number of electronic Newsletters - IEEE NSW SECTION issued three, issued in March, July and November 2006 to all members.
- Section and Chapters Web Pages are all linked from the main section Website located here -> http://ewh.ieee.org/r10/nsw/

## B.5 Awards

- No award program was implemented in 2006.

## B.6 Chapter Activities

- Computer Chapter Activities – No committee in 2006, but two lectures by visiting DL's made up the reporting.
- Antennas & Propagation/Microwave Theory & Technology

  1. 9 Feb. 2007: Dr. Trevor Bird, Chief Scientist, CSIRO ICT Centre presented a joint IEEE/IE (AUST)seminar on "Terahertz Imaging". 48 attendees were present among them 20 IEEE members and 28 guests.
  2. 3 May 2006: Dr. Cezary Sydlo, Research Scientist, High Frequency Techniques Group, Technical University Darmsdat, Germany presented a talk on "Terahertz Technology and antenna design" at University of Technology, Sydney. There were 15 attendees :5 IEEE members, 5 IEEE student members and 5 guests.
  3. 24 August 2006: Dr. Shaun Cunningham, CEO of EpiTactix Pty Ltd, Marsfield, Sydney, presented a joint IEEE/IE (Aust) technical presentation on "Compound semiconductors-Transistors in Technicolour"
  at Institute of Engineers Auditorium. 30 attendies : 15 IEEE members and 15 guests.
  4. 30 October 2006: Professor Toshiyuki Yakabe, University of Electro-communications, Japan, presented a talk on "New developments on Six-port based vector Network Analysers" at University of Technology, Sydney. No of attendees: 16, IEEE members :5, IEEE student members:5, guests:6.
  5. 15 November 2006: David Burger of Energy Australia presented a talk on " Construction and use of 7 MHz Yagi antennas " at the Terrey Hills Emergency Services headquarters, Terrey Hills, Sydney. There were 30 attendees, IEEE members :4, Guests : 26.

**Distinguished Lecturer Program**
We planned to host IEEE AP society distinguished lecturer's visit in Aug 2006 but the lecturer could not make it due to his other commitments during that time. We are hoping to host the visit in 2007.
**Region 10 Activities**
Assoc. Prof. Ananda Sanagavarapu ( Mohan) attended the Region 10 , IEEE Antennas and Propagation Society chapter chairs meeting on 3 November, 2006 at Singapore held during the International Conference On Antennas and Propagation (ISAP06). The meeting was attended by all active chapters within Region 10 plus Adcom members of IEEE Antennas and Propagation Society. Dr. Sanagavarapu (Mohan) was also made member of the ISAP International Programme Committee. The committee expressed their interest for Australia to host ISAP conference in future.
Assoc. Prof. Sanagavarapu (Mohan) is invited to attend the Region 10 IEEE Microwave Theory and Techniques Society chapter Chairs meeting to be held on 13 December 2006 in Yokohama, Japan, in conjunction with Asia Pacific Microwave Conference (APMC06) in Yokohama, Japan.

**Reported by** : Assoc. Prof. Ananda Mohan Sanagavarapu ( aka Ananda S Mohan)
Chair, IEEE NSW Joint AP/MTT joint Chapter, 27 November 2006

- Power Engineering Activities

Refer to Appendix 4

- Power Electronics/Industrial Applications/Industrial Electronics

Refer to Appendix 5

- Communications/Signal Processing

A/Prof Sam Reisenfeld, Chairman
IEEE NSW Section, Communications and Signal Processing Joint Chapter 24 November 2006
**Conference Sponsorship**
13-16 March 2006, AusWireless'06 Conference, Crowne Plaza Hotel, Sydney
2006 Technical Activities
24 March 2006, Prof Robert Gray, Extracting Discrete Information from a Continuous World: Quantisation, Compression, and Classification, 24 IEEE Members, 10 Guests, UTS (IEEE Signal Processing Society Distinguished Lecturer).
27 March 2006, Prof Robert Gray, Packet Speech on the Arpanet: A History of the Early Linear Predictive Coded (LPC) Speech and Its Accidental Impact on Internet Protocol, 12 IEEE Members, 4 guests, UTS, (IEEE Signal Processing Society Distinguished Lecturer).
5 April 2006, Prof C.C. Jay Kuo, Digital Media Revolution-How the Digital Technology Impacts Our Daily Life, 3 IEEE members, 6 guests, UTS (IEEE Signal Processing Society Distinguished Lecturer).
6 April 2006, Prof C.C. Jay Kuo, Technologies for Movie Content, Analysis, Summarisation and Skimming, 5 IEEE members, 2 guests, UTS (IEEE Signal Processing Society Distinguished Lecturer)
6 April 2006, Prof C.C. Jay Kuo, Ubiquitous Multimedia Computing and Communications: Challenges and Future Trends, 8 IEEE members, 3 guests (IEEE Signal Processing Society Distinguished Lecturer).
14 June 2006, Prof Jacob Gavan, Radio Systems Techniques for Enhancing Energy Radiation, Reducing Interference and Parasitic Radiation, UTS, 6 IEEE members, 6 guests, UTS (IEEE Communications Society Distinguished Lecturer).
15 June 2006, Prof Jacob Gavan, Stratospheric Quasi-Stationary Platforms, 6 IEEE members, 6 guests, UTS (IEEE Communications Society Distinguished Lecturer).

- Circuits and Systems/Solid State Circuits

No report. There has been no CAS/SSC activity in 2006, but the committee has requested CAS/SSC become a joint chapter with LEOS below. This is pending a decision for 2007.

- Lasers and Electro Optics Society (LEOS)

No report, there have been no activities for LEOS in 2006, and there is actually been no committee formed since Dave Moss and Graham Town set it up in August 2005. The new 2007 committee is being established.

- Engineering in Medicine and Biology Society (EMBS)

Founding Chair: Dr Carolyn McGregor. Launched in September 2006, one technical lecture was held at ResMed, with a brilliant response and feedback from members.

## PART C – GOALS AND PLANS

**C.1 Goals** – not communicated by the Chair.

**C.2 Implementation Plans**

## PART D - OTHERS

**D.1 Relationship with National Societies –** An MOU was signed between IET and Engineers Australia on 31 March 2006. We maintain a significant joint Events calendar between IET, Engineers Australia and IEEE here in New South Wales.

## Appendix 1, Complete Events Calendar for 2006

# *IEEE, IEE, Engineers Australia & Related Electrical Engineering Events Calendar, NSW, 2006 / 2007*

*New South Wales, Australia*

*These events may contribute to the Continuing Professional Development (CPD) requirements of CPEng.*

"Joint" events refers to IEEE/IEE/EA under the 2003/2006 MOU. **updated: 22 May 2006.**

Events at: 8 Thomas, Chatswood - 5:30pm for a 6:00pm start with light refreshments. Events are no charge UNLESS flagged otherwise.

| 2006 | Event | Speaker | Host | Organiser | Venue |
|---|---|---|---|---|---|
| 25/05/2006 | Test Data Generation for Large Software Systems | Laksman Narasingham | Joint/IEEE | Ian Boyd | Level 5, Gordon Social and Recreation Club, Mandarin Centre, Albert Avenue, Chatswood |
| 1/06/2006 | Electrical Branch Engineers Australia Sydney Division, Committee Meeting | | EA | Mark Edmunds | 17:30 For 18:00 To 19:30 , venue TBC. |
| 5/06/2006 | IEEE NSW SECTION - Meeting | | IEEE | David Tien | (7:00~9:00pm) North Sydney TAFE, Room AG20. |
| 5/06/2006 | Joint IEEE/IEE/IEAust Lecture Program meeting | | Joint | Peter Hitchiner | (6:00~7:00pm) North Sydney TAFE, Room AG20. |
| 8/06/2006 | The Black Hole in Power System Security Emergency Reactive Power Control | Walter Lachs | Joint/IEEE | Ian Boyd | 8 Thomas, Chatswood |
| 22/06/2006 | Micro Sensors | Prof Kwok CheeYee | Joint/IEE | John Englefield | 8 Thomas, Chatswood |
| 3/07/2006 | IEEE NSW SECTION - Meeting | | IEEE | David Tien | (7:00~9:00pm) Venue to be Confirmed |
| 3/07/2006 | Joint IEEE/IEE/IEAust Lecture Program meeting | | Joint | Peter Hitchiner | (6:00~7:00pm) Venue to be confirmed. |
| 6/07/2006 | Electrical Branch Engineers Australia Sydney Division, Committee Meeting | | EA | Mark Edmunds | 17:30 For 18:00 To 19:30 , 8 Thomas |
| 13/07/2006 | Transrapid rail system | B Luber-Siemens | Joint/EA | George Fox | 8 Thomas, Chatswood |
| 13/07/2006 & 14/07/2006 | Power System Planning (course fees apply) | | EEA | 03 9326 9888 | Sydney |
| 27/07/2006 | Wave Energy | Dr Raymond Alcorn | Joint/IEE | John Englefield | 8 Thomas, Chatswood |
| 3/08/2006 | Electrical Branch Engineers Australia Sydney Division, Committee Meeting | | EA | Mark Edmunds | 17:30 For 18:00 To 19:30 , 8 Thomas |
| 7/08/2006 | IEEE NSW SECTION - Meeting | | IEEE | David Tien | (7:00~9:00pm) North Sydney TAFE, Room AG20. |
| 7/08/2006 | Joint IEEE/IEE/IEAust Lecture Program meeting | | Joint | Peter Hitchiner | (6:00~7:00pm) North Sydney TAFE, Room AG20. |
| 10/08/2006 | 3G Hutchison Mobile Virtual Network Options | EA to advise John Englefield | Joint/IEE | John Englefield | 8 Thomas, Chatswood |
| 12/08/2006 | Start of Engineering Week | see website | Joint/EA | Richard Barnes, Michelle Crowshaw | http://www.sydney.engineersaustralia.org.au/engineeringWeek/default.html |
| 14/08/2006 | Eng week: Harricks Address: Intellectual Property: a key to Engineering growth | see website | Joint/EA | Richard Barnes, Michelle Crowshaw | 5:30pm |
| 17/08/2006 | Eng week: The Great Engineering Challenge. | see website | Joint/EA | Richard Barnes, Michelle Crowshaw | 10am, UNSW |
| 18/08/2006 | Eng week: RedR Social Lawn Bowls Fundraiser | see website | Joint/EA | Richard Barnes, Michelle Crowshaw | 6pm |
| 21/08/2006 | End of Engineering Week | see website | Joint/EA | | http://www.sydney.engineersaustralia.org.au/engineeringWeek/default.html |
| 24/08/2006 & 25/08/2006 | Power System Design Principles (course fees apply) | | EEA | 03 9326 9888 | Sydney |
| 24/08/2006 | Power Electronics | | Joint/IEEE | Ian Boyd | 8 Thomas, Chatswood |
| 4/09/2006 | IEEE NSW SECTION - Meeting | | IEEE | David Tien | (7:00~9:00pm) North Sydney TAFE, Room AG20. |
| 4/09/2006 | Joint IEEE/IEE/IEAust Lecture Program meeting | | Joint | Peter Hitchiner | (6:00~7:00pm) North Sydney TAFE, Room AG20. |
| 7/09/2006 | Electrical Branch Engineers Australia Sydney Division, Committee Meeting | | EA | Mark Edmunds | 17:30 For 18:00 To 19:30 , 8 Thomas |
| 14/09/2006 | 3G Hutchison Mobile Virtual Network Options | Consultant Maurie Dobbin/Upali | Joint/IEE | Peter Hitchiner | 8 Thomas, Chatswood |
| 22/09/2006 | Engineering Excellence Awards (possible fees apply) | see EA website | EA | | Level 3, 8 Thomas, Chatwood |
| 28/9/2006 & 29/8/2006 | Protection Systems, Motor Starters & Power Quality (course fees apply) | | EEA | 03 9326 9888 | Sydney |
| 28/09/2006 | Enviro-mission Solar Tower | R Davey | Joint/EA | George Fox | 8 Thomas, Chatswood |
| 5/10/2006 | Electrical Branch Engineers Australia Sydney Division, Committee Meeting | | EA | Mark Edmunds | 17:30 For 18:00 To 19:30 , 8 Thomas |
| 9/10/2006 | IEEE NSW SECTION - Meeting | | IEEE | David Tien | (7:00~9:00pm) To be confirmed. |
| 12/10/2006 | Mobile Positioning System, 911 / 000 systems. | EA to advise John Englefield | Joint/IEE | John Englefield | 8 Thomas, Chatswood |
| 26/10/2006 & 27/10/2006 | Earthing Systems (course fees apply) | | EEA | 03 9326 9888 | Sydney |
| 26/10/2006 | IEEE 802.11(x) Wireless Security **(To be confirmed)** | | Joint/IEEE | Ian Boyd | 8 Thomas, Chatswood |
| 2/11/2006 | Electrical Branch Engineers Australia Sydney Division, Committee Meeting | | EA | Mark Edmunds | 17:30 For 18:00 To 19:30 , 8 Thomas |
| 6/11/2006 | IEEE NSW SECTION - Meeting | | IEEE | David Tien | (7:00~9:00pm) North Sydney TAFE, Room AG20. |
| 6/11/2006 | Joint IEEE/IEE/IEAust Lecture Program meeting | | Joint | Peter Hitchiner | (6:00~7:00pm) North Sydney TAFE, Room AG20. |
| 9/11/2006 | Challenges in the Uprating of Ryde Pumping Station | George Havens-CH2MHill | Joint/IEE | John Englefield | 8 Thomas, Chatswood |
| 23/11/2006 | Changes to Professional Standards, AGM | John Gebler | Joint/EA | John Gebler | 8 Thomas, Chatswood |
| 24/11/2006 | IEEE NSW AGM | | IEEE | David Tien | TBA (6:00pm to 10:00pm) |
| 30/11/2006 & 1/12/2006 | Inspection, Testing, Commissioning & Contract Management (course fees apply) | | EEA | 03 9326 9888 | Sydney |

## Appendix 2, Financials

# IEEE NSW SECTION

02/02/07

## Balance Sheet
### As of December 31, 2006

| | | Dec 31, '06 |
|---|---|---|
| **ASSETS** | | |
| **Current Assets** | | |
| **Current/Savings** | | |
| **Cash Accounts** | | |
| **Cheque Account 06 2192 10081351** | 29,533.03 | |
| **Total Cash Accounts** | | 29,533.03 |
| **Total Current/Savings** | | 29,533.03 |
| **Other Current Assets** | | |
| **Investments** | | |
| **Commonwealth CMT A/C 37866076** | 120,000.00 | |
| **Total Investments** | | 120,000.00 |
| **Total Other Current Assets** | | 120,000.00 |
| **Total Current Assets** | | 149,533.03 |
| **Fixed Assets** | | |
| **Computer Software** | | |
| **Manaccom Publish PDF Prof** | 90.00 | |
| **Total Computer Software** | | 90.00 |
| **Total Fixed Assets** | | 90.00 |
| **Other Assets** | | |
| **Other Assets** | | |
| **Conference Funding** | | |
| **Int Conf On Wireless Broadband** | 10,000.00 | |
| **Total Conference Funding** | 10,000.00 | |
| **Total Other Assets** | | 10,000.00 |
| **Total Other Assets** | | 10,000.00 |
| **TOTAL ASSETS** | | **159,623.03** |
| **LIABILITIES & EQUITY** | | |
| **Liabilities** | | |
| **Current Liabilities** | | |
| **Other Current Liabilities** | | |
| **Tax Payable** | | |
| **GST** | | |
| **Tax Collected** | 72.72 | |
| **Tax Paid** | (3,445.75) | |
| **Tax Transfer ATO** | 2,975.01 | |
| **Total GST** | (398.02) | |
| **Total Tax Payable** | | (398.02) |
| **Total Other Current Liabilities** | | (398.02) |
| **Total Current Liabilities** | | (398.02) |
| **Total Liabilities** | | (398.02) |
| **Equity** | | |
| **Opening Bal Equity** | | 154,725.54 |
| **Retained Earnings** | | 5,710.93 |
| **Net Income** | | (415.42) |
| **Total Equity** | | 160,021.05 |

# IEEE NSW SECTION

02/02/07

## Balance Sheet
### As of December 31, 2006

| | Dec 31, '06 |
|---|---|
| TOTAL LIABILITIES & EQUITY | 159,623.03 |

# IEEE NSW SECTION

02/02/07

## Income and Expenditure

### January through December 2006

| | Jan - Dec '06 | Budget |
|---|---|---|
| **Income** | | |
| 2.00 PROGRAM REVENUE | | |
| 2.40 Advertising - Non-IEEE | 0.00 | 500.00 |
| 2.50 Conference Revenue | 0.00 | 3,000.00 |
| Total 2.00 PROGRAM REVENUE | 0.00 | 3,500.00 |
| 3.00 OTHER RECEIPTS | | |
| 3.10 Rebate from IEEE HQ | 16,367.30 | 15,500.00 |
| 3.34 IEEE HQ and Societies | | |
| Computer Society | 185.19 | 180.00 |
| Total 3.34 IEEE HQ and Societies | 185.19 | 180.00 |
| 3.40 Interest | 6,079.77 | 5,700.00 |
| Total 3.00 OTHER RECEIPTS | 22,632.26 | 21,380.00 |
| **Total Income** | 22,632.26 | 24,880.00 |
| **Expense** | | |
| 4.00 PROGRAM EXPENSES | | |
| 4.10 Meetings and social events | | |
| AGM Expenses | 2,127.77 | 2,000.00 |
| Committee Meetings | 250.91 | |
| 4.10 Meetings and social events - Other | 0.00 | 1,000.00 |
| Total 4.10 Meetings and social events | 2,378.68 | 3,000.00 |
| 4.20 Publication expenses | | |
| Bulk Mailing - Circuit | 59.09 | 1,300.00 |
| Production - Circuit | 1,220.80 | 1,100.00 |
| Total 4.20 Publication expenses | 1,279.89 | 2,400.00 |
| 4.70 Professional activities | | |
| Engineering Week | 1,363.64 | 1,365.00 |
| Joint Lecture Program-IEAust | 1,363.64 | 1,365.00 |
| Joint Lecture Program-Speakers | 472.00 | 500.00 |
| Total 4.70 Professional activities | 3,199.28 | 3,230.00 |
| 4.80 Student activities | | |
| Student Membership Subsidy | 1,702.78 | 4,500.00 |
| 4.80 Student activities - Other | 500.00 | 1,000.00 |
| Total 4.80 Student activities | 2,202.78 | 5,500.00 |
| 4.90 Other program expenses | 200.00 | |
| Total 4.00 PROGRAM EXPENSES | 9,260.63 | 14,130.00 |
| 5.00 MANAGEMENT & GENERAL EXP. | | |
| 5.20 Travel | 5,052.75 | 2,000.00 |
| 5.50 Support to chapters | | |
| C&S/SSC | 0.00 | 500.00 |
| Comm/Sig | 2,164.18 | 500.00 |
| Computer Society | 0.00 | 700.00 |
| GOLD | 0.00 | 500.00 |
| LEOS | 327.50 | |
| MTT/AP | 0.00 | 500.00 |
| PEL/IA/IE | 0.00 | 500.00 |
| Power | 1,004.59 | 500.00 |
| Total 5.50 Support to chapters | 3,496.27 | 3,700.00 |
| 5.54 RAB/Board expenses | | |
| Australia Council | 1,225.00 | 1,200.00 |
| Total 5.54 RAB/Board expenses | 1,225.00 | 1,200.00 |
| 5.56 IEEE HQ & Society expenses | | |
| Sections Congress | 0.00 | 500.00 |

# IEEE NSW SECTION

02/02/07

## Income and Expenditure

### January through December 2006

| | Jan - Dec '06 | Budget |
|---|---|---|
| **Total 5.56 IEEE HQ & Society expenses** | 0.00 | 500.00 |
| **5.60 Other management & general** | | |
| **Audit** | 0.00 | 1,000.00 |
| **Bank Fees** | 75.19 | 50.00 |
| **Book-keeping fee** | 0.00 | 100.00 |
| **Postage** | 24.74 | |
| **Printing & Stationery** | 520.06 | 100.00 |
| **Secretarial Service** | 3,393.04 | 2,000.00 |
| **5.60 Other management & general - Other** | 0.00 | 100.00 |
| **Total 5.60 Other management & general** | 4,013.03 | 3,350.00 |
| **Total 5.00 MANAGEMENT & GENERAL EXP.** | 13,787.05 | 10,750.00 |
| **Total Expense** | 23,047.68 | 24,880.00 |
| **Net Income** | **(415.42)** | **0.00** |

## Appendix 3, Membership Retention

# MEMBERSHIP PROFILE

An overview of the number and types of IEEE members since the inception of the IEEE in Australia is shown below.

From 1985 onwards however, only the membership located in NSW is shown.

**IEEE NSW Section** **Australian Section**

| Year | Fellow | Senior | Member | Associate | Student | Total IEEE Members | Affiliates |
|---|---|---|---|---|---|---|---|
| 2007 | | | | | | | |
| 2006 | 19 | 152 | 1613 | 88 | 446 | 2318 | 165 |
| 2005 | 15 | 131 | 1617 | 103 | 540 | 2406 | 191 |
| 2004 | 16 | 123 | 1571 | 100 | 418 | 2228 | 178 |
| 2003 | 15 | 126 | 1582 | 204 | 532 | 2459 | 210 |
| 2002 | 15 | 139 | 1492 | 243 | 559 | 2448 | 250 |
| 2001 | 16 | 134 | 1514 | 310 | 317 | 2291 | 262 |
| 2000 | 16 | 129 | 1544 | 240 | 357 | 2286 | 286 |
| 1999 | 16 | 124 | 1484 | 210 | 293 | 2127 | 378 |
| 1998 | 16 | 123 | 1473 | 181 | 345 | 2138 | 338 |
| 1997 | 16 | 113 | 1389 | 158 | 287 | 1963 | 281 |
| 1996 | 15 | 107 | 1336 | 167 | 285 | 1910 | 262 |
| 1995 | 14 | 93 | 1376 | 147 | 253 | 1883 | 274 |
| 1994 | 13 | 87 | 1266 | 88 | 302 | 1756 | 263 |
| 1993 | 10 | 85 | 1293 | 76 | 192 | 1656 | 194 |
| 1992 | 9 | 77 | 1202 | 75 | 200 | 1563 | 114 |
| 1991 | 9 | 63 | 1155 | 80 | 165 | 1472 | 113 |
| 1990 | 7 | 56 | 1026 | 74 | 171 | 1334 | 118 |
| 1989 | 6 | 56 | 911 | 74 | 141 | 1188 | 124 |
| 1988 | 5 | 58 | 833 | 58 | 121 | 1075 | 84 |
| 1987 | 6 | 64 | 826 | 45 | 117 | 1058 | 81 |
| 1986 | 5 | 64 | 720 | 44 | 100 | 933 | 76 |
| 1985 | 4 | 64 | 698 | 38 | 93 | 897 | 82 |
| 1984 | 5 | 77 | 954 | 44 | 183 | 1263 | 97 |
| 1983 | 5 | 79 | 916 | 57 | 185 | 1242 | 83 |
| 1982 | 5 | 86 | 1252 | 77 | 166 | 1586 | 117 |
| 1981 | 4 | 64 | 802 | 48 | 117 | 1035 | 80 |
| 1980 | 3 | 67 | 700 | 44 | 177 | 991 | 46 |
| 1979 | 3 | 64 | 680 | 38 | 142 | 927 | 35 |
| 1978 | 1 | 56 | 609 | 33 | 121 | 820 | 23 |
| 1977 | 1 | 53 | 507 | 18 | 113 | 692 | 16 |
| 1976 | 1 | 53 | 459 | 20 | 90 | 623 | 12 |
| 1975 | 1 | 54 | 384 | 17 | 96 | 552 | 8 |
| 1974 | 1 | 59 | 449 | 35 | 107 | 651 | 11 |
| 1973 | 1 | 51 | 400 | 33 | 80 | 565 | 7 |
| 1972 | 1 | 53 | 324 | 33 | 56 | 467 | 4 |

# IEEE NSW POWER ENGINEERING SOCIETY
# 2006 PES CHAPTER CHAIRS REPORT

1. Membership
   a. Membership has increased in 2006 by about 5%
   b. Student Membership(TBA)
   c. Senior Members(TBA)
   d. Fellows(TBA)
   e. Life Members(TBA)

2. Joint Lectures
   a. Dr Walter Lachs gave a lecture on Power System Stability on 8 June 2006 at Engineers Australia 8 Thomas St Chatswood.

3. Distinguished Lecturer Program
   a. Prof Sivaji Chakravorti of Jadavpur University Kolkata gave a series of three lectures on 20 July 2006 at Engineers Australia 8 Thomas St Chatswood.
   b. Addition of Victor Gosbel and Ron Stillman to DLP did not progress.

4. Student Lectures
   a. No Student Lunchtime Lectures were given in 2006

5. PES Reporting
   a. L31 Forms for all technical, administrative and other meetings have been lodged electronically
   b. The DLP Feedback Form for Prof Chakravortis lectures has been lodged

6. Outstanding Engineer Award
   a. Nominations for the Outstanding Engineer Award have been called and close on 30 November 2006.
   b. Selection Panel will comprise Dr Graeme Gwilliam, Antony Zaglas and John Robinson.
   c. Selection to be made by mid January 2006 and ratified beginning February 2007.

7. R10 PES 2005 Chapters Meet Bangkok
   a. A Zaglas represented NSW(stand in for Dr Graeme Gwilliam) in December 2005.
   b. NSW Section contributed US$200 towards expenses with the rest being made up by IEEE.
   b. Region 10 PES Chapters meet is scheduled every two years but has been held every three years
   c. Qld and Victoria did not send Reps to Bangkok

8. Finance
   a. NSW PES does not have a Bank Account
   b. DLP Costs were submitted to NSW Section Treasurer. These costs essentially comprised local accommodation, sustenance and transport expenses for Prof Chakravorty and Light lunch for attendees of lectures. There was no charge for attending the lectures as it would have complicated the situation with Engineers Australia providing the facilities free of charge.
   c. There is an annual budget of $500 for each NSW Chapter. Anything above this must be approved by the NSW Section Executive

d. We are entitled to the US$200 Report Rebate if we submit our reports in time and meet the minimum criteria of two technical meetings
e. There is a US$400 High performing chapter award if we meet all the criteria for Technical Meetings, Reporting, and have set up an Outstanding Engineer Award
f. There is an US$1000 Outstanding Chapter award which is much harder to obtain
g. We can charge for any workshops that we host but this involves some risk with regard to numbers attending if we do not have bookings in advance and/or sponsorship.

9. Thanks
   a. John L Robinson
   b. Dr Graeme Gwilliam
   c. Dr Ian Boyd
   d. Eddie Fong
   e. Dan Candotti
   f. Dr Walter Lachs
   g. Prof Sivaji Chakravorti
   h. Bangkok PES
   i. Dr Subrata Mukhopadhyay
   j. A Prof Lalit Goel for his assistance with The DLP

Antony Zaglas
Power Engineering Society NSW Chapter Chair

# Report from
# IEEE NSW IAS/PELS/IES Chapter

2006

The Chapter organized two IEEE DL seminars from Professor Tom Jahns, a past IEEE Distinguished Lecturer and a President of the IEEE Power Electronics Society. The first of the two seminars were jointly organized as part of the Engineers Australia/IEEE/IEE Lecture Series and presented at the Engineers Australia House at 8 Thomas Street, Chatswood, on 26 October 2006. The second seminar was presented at the University of New South Wales, Kensington, on 1 November 2006. The attendance at both seminars exceeded 35.

The titles of the seminars were:

1. The Expanding Role of Permanent Magnet Machines in a Greener, Energy-Efficient Society, held at the Engineers Australia house at Chatswood from 6-7 pm on 26 October, 2006. Attendance: about 35.

2. Recent Advances and Future Trends in Power Electronics for Industrial and Automotive Applications, held at the School of Electrical Engineering & Telecommunications, University of New South Wales, Sydney, from 6-7pm on 1 November 2006. Attendance: about 45.

These two seminars were free of cost to the attendees. Professor Tom Jahns was in Sydney as a Visiting Professor at the School of Electrical Engineering & Telecommunications, University of New South Wales, Sydney, which meant that there was no cost to the IEEE NSW.

3. A further seminar from a past IEEE Distinguished Lecturer, Bruce L. McClung, is currently being planned for holding in February, 2007.

**The proposed Committee for 2007:**

The existing IAS/PELS/IES Chapter discussed the formation of a new Committee for 2007. After requesting members to volunteer for the Committee positions, the following was determined as the Committee for 2007.

| | | |
|---|---|---|
| Professor Danny Soetanto | (#07718497) – | Chair |
| A/Professor M. F. Rahman | (#07822828) – | Secretary |
| A/Professor M. Nagrial | (#06895361) – | Treasurer |

Professor Soetanto is planning to add a few other names to the Committee soon.

# Brief Resume of Professor Tom Jahns

Professor Tom Jahns obtained his PhD in 1978 from MIT in Cambridge, Massachusetts. He worked for GE Corporate Research and Development in New York State for 15 years, including two years on a research sabbatical at MIT from 1996-98. While at MIT, Dr. Jahns served as Co-Director of the MIT/Industry Consortium that played an important role in defining the 42V PowerNet for automotive accessory systems. He is currently a Grainger Professor of Power Electronics and Electrical Machines at the University of Wisconsin-Madison.

Professor Jahns has received many prestigious IEEE awards including the William Newell and Nicola Tesla awards, several Best Paper awards from the IEEE, and multiple Technical Achievement awards from GE. He has served on US National Research Council technical advisory panels and he is a Fellow of the IEEE. He is a Past President of the IEEE Power Electronics Society and has served as a Distinguished Lecturer in both the IEEE Power Electronics Society and the IEEE Industry Applications Society.

Professor Jahns is on a sabbatical as a Visiting Professor at the UNSW since July 2006.