



#### The Institute of Electrical and Electronics Engineers, Inc.

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IEEE NEW SOUTH WALES SECTION ARBN 078 576 495 ABN 34 078 576 495 Editor: Eddie Fong Email:eddiefong@ieee.org

November 2006

### **Contents**

Volume 29

Item		Page
1.	NSW Section AGM and Dinner 2006	1
2.	Messages From The Chair	1
3.	News In Brief	2
4.	Chapter News	5
5.	Technology & History	7
6.	Technical Meetings & Conferences	8
7.	Continue to Receive CIRCUIT by Post	9
8.	NSW Section AGM & Dinner Reservation	9

Issue 3

# 1. NSW Section AGM And Dinner – Friday 24 Nov 2006

All IEEE members are invited to attend the NSW Section Annual General Meeting, which will be held at the Boronia Grove, Epping (behind the Epping RSL Club, Epping, access through the car park between Epping Club and Coles store) on Friday, 24 Nov 2006, commencing at 7pm sharp. The Annual Dinner will follow after the conclusion of the NSW Section AGM at 8pm. The cost of the dinner is \$35 per person inclusive of drinks on the table only.

Members wishing to attend should complete the reservation form and forward, together with payment, to the Chair through the Secretariat, by Friday 17 November 2006.

Prior to the NSW Section AGM, Chapters will conduct their AGMs to elect new office bearers from 6pm. Chapter Chairs are asked to conclude these meetings by 7 pm and also provide annual reports for distribution at the NSW Section AGM.

#### **AGENDA - NSW Section AGM 2006**

- 1. Attendance and Apologies
- 2. Minutes of 2005 AGM and Discussion
- 3. Report of Section Chair
- 4. Report of Section Treasurer
- 5. Chapter Reports and Chapter roll call (7 Chapters in

the Section)

- 6. Nomination of 2007 Section Committee
- 7. Region 10 student paper winners
- 8. General Business

### 2. Messages From The Chair

When it comes to writing a final article as the Chair of the IEEE NSW Section, I must admit to a little nostalgia.

The last 2 years have really flown by. There have been some highlights together with some matters that may have been handled differently. Whilst there will be more detail in the Section Annual Report for 2006, some of the highlights include the establishment of 2 new Chapters, the consolidation of a group of Chapters and having about 7 visiting Distinguished Lecturers visit us during the 2 years.

But enough of the past; whither goeth the future. At the time of writing the person to be the 2007 NSW Section Committee Chair has not yet been decided. I will be moving on to a new 'job' in Region 10 and the New Year brings changes to the NSW Section Committee officers and team.

The strengths of the IEEE is its diversity, bringing together the high level of "skills" of its members, and the local management of the Section and Chapters which can always benefit from having more volunteers. For those wishing to serve the IEEE organization the Chapter committees are generally a good starting ground as you are with people of similar technical interests. From there the opportunities for those who wish to commit further time and effort are like seeking further parts of the universe. It takes time, and a little effort, to understand the functioning and the administrative processes of the Section, Australia Council and Region 10 levels, and the manner in which the RAB (Regional Activities Board), the TAB, and the IEEE Board manage the IEEE overall from Head Office. One of the most interesting aspects I found with the IEEE was that for an organization, with

over 650,000 members worldwide, there is really only one level of administrative control (excluding the RAB which functions as an advisory and monitoring body) between myself as a Section Chair and the Chair of the IEEE Board; namely the Region 10 Chair. In Australia we have the Australia Council, which concerns itself with matters inside Australia on behalf of the Region 10 Chair. There are of course numerous supportive and advisory Boards, Committees, etc that one would normally consult in seeking advice, but this does not change a very flat administrative structure.

Let me assure you that the gratification of having achieved something for the benefit of the other members is a pleasant experience; that is what volunteerism is all about.

I thank each and every one of you for your support and interest in what I have tried to achieve during my term of office. I wish you all well for the future and look forward to seeing some new faces actively participating in the Chapter and Section committees in the future.



Graeme Gwilliam gb.gwilliam@ieee.org. Chair NSW Section

### 3. News In Brief

## 3.1. 2007/2008 Region 10 Life Member Coordinator

Congratulations to Graeme Gwilliam who has been appointed to be the Life Member Co-ordinator on the Region 10 Excom for the term 2007/8. This is a new position on the region 10 Excom. Best wishes to Graeme for his new role in Region 10.

### 3.2. The Region 10 GOLD Award

This is the first Award with the Program endorsed at the Chiangmai Region 10 Committee Meeting.

The Region 10 GOLD Award goes to Helene Hoi-Ying Fung, Chair of GOLD Group, Western Australia Section, for outstanding contribution in running local activities targeted towards University students and graduates and soliciting industry sponsorship to support GOLD activities.

Helene is invited to the coming Region 10 Committee Meeting to be held in Sabah, East Malaysia to receive her Award Certificate.

## 3.3. IEEE Region 10 Student Paper Winner

#### Postgraduate:

Winner –Raymond Hui-Wai Lam, HK

Second -Zeng Jia, HK

Third -Norbert Dommel Yan Wong, NSW Australia

#### **Undergraduate**:

Winner -Asif Islam Khan, Bangladesh Second -Toufiqul Islam, Bangladesh Third - Lam Hiu Man, HK

### 3.4. The 2006 IEEE Annual Election

This year, for the first time, voters can view video footage of the president-elect candidates through <a href="http://www.ieee.org/elections">http://www.ieee.org/elections</a> or From IEEE.tv.

One video features candidates Lewis Terman and John Vig answering questions asked by members; the other is a recording of the annual President-Elect Candidates' Debate, hosted by the IEEE Philadelphia Section.

Also for the first time, the voting privilege is being extended to eligible graduate student members. All eligible voting IEEE members should have received their 2006 IEEE Annual Election ballot packages in the mail. Ballot materials can also be accessed electronically at <a href="https://www.directvote.net/ieee/">https://www.directvote.net/ieee/</a>.

For additional information about the IEEE Annual Election, contact: <a href="mailto:corp-election@ieee.org">corp-election@ieee.org</a>.

## 3.5. New Engineering Web Site Answers Your Questions

Want to know what engineering is all about and where your son or daughter can study it? These questions and more are answered at the new TryEngineering Web site <a href="http://www.tryengineering.org">http://www.tryengineering.org</a>. This Web site is meant to inform students, teachers, school counsellors, and parents about engineering and what engineers do.

### 3.6. Membership Recruitment Kits

Shipment of the 2007 Membership Recruitment Kits is now underway. The kits were developed to assist volunteers in meeting the membership development Goals of their entities. Kits have been mailed to the Membership Development Chairs of IEEE Sections (or the Section Chair, if there is no MD Chair). Student

focused kits have been sent to all Student Branches. Any volunteer requiring additional supplies of these recruitment materials can order them online, at: <a href="http://www.ieee.org/web/volunteers/membership">http://www.ieee.org/web/volunteers/membership</a> dev/mdsupplyform.html.

Included in the Recruitment Kits are 2007 membership brochures/applications, as well as a new IEEE Membership Development Manual. The manual is a field guide for MD volunteers containing a membership-development calendar, an inventory of member benefits, sample outreach letters, and more. Also included is a 2007 Membership Development "Cheat Sheet," a 2-page summary of member benefits with suggested responses to the most common objections given to joining IEEE. Both the MD Manual and the Cheat Sheet can also be downloaded from the Membership Development Online Community at <a href="https://www.ieeecommunities.org/ieee.md.net">https://www.ieeecommunities.org/ieee.md.net</a> (an IEEE web account is required for access).

### 3.7. Engineering Management

Five Articles By Management Guru Peter F. Drucker Featured in New Issue of IEEE Magazine. The new issue of the "IEEE Engineering Management Review" (v. 34, no.2) features five articles by management guru Peter F. Drucker, who is regarded by experts in the business world as the founding father of the study of management. Articles include "Management: The Problems of Success" and "Knowledge-Worker Productivity: The Biggest Challenge." Abstracts for all articles in the issue can be found in the IEEE Xplore digital library, where subscribers will have full-text access to the publication. Visit: http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumb

### 3.8. IEEE Internet TV

er=46

On 15 August, IEEE launched the Beta release of IEEE.tv, an internet-based broadcasting network that will produce and deliver pre-recorded, special interest programming for engineers and technologists. A collaborative effort of IEEE volunteers, members and staff across the organization, the new service will initially be available only to members only through the myIEEE web portal (<a href="www.ieee.org/myieee">www.ieee.org/myieee</a>). It will expand to provide select content intended for the general public starting in September.

IEEE.tv will feature original IEEE-produced content within a viewer that may in the future serve as a carrier for non-IEEE productions. Series include IEEE conference highlights, interviews with authors who Publish books with IEEE, IEEE president-elect candidate debates, and introductions to new IEEE products. In September, general interest programs including those promoting careers in engineering and demonstrating new technology in everyday applications will be available to anyone who visits

www.ieee.org/ieeetv.Individuals with questions can contact tv@ieee.org

### 3.9. IEEE Mentoring Connection

The IEEE Mentoring Connection is a new online service that matches IEEE members to facilitate a mentoring partnership. The program, designed as a way for members to share workplace experience and offer career guidance, serves as a career development tool for members who have recently entered the workforce and a way for more experienced members to give back to the community.

Accessed through the membership benefits section of the IEEE Web site, potential mentors and mentees are asked to provide information that becomes part of a database. Once registered, mentees may search the database and select a mentor based on technical or educational background, geographic location or other criteria. Also available to participants are online training materials, such as a mentoring resource guide. For more information on the IEEE Mentoring Connection, visit www.ieee.org/mentoring or contact Cathy Downer, Regional Activities, at <a href="mailto:c.downer@ieee.org">c.downer@ieee.org</a> or +1 732 562 5506.

## 3.10. Fellow Program Seeks Application

IEEE Members are being encouraged to identify as Fellow candidates senior members who have made extraordinary accomplishments in the application of technology in IEEE fields of interest.

The Fellow policies and procedures were changed in 2003 to increase the number of Fellow nominees from industry. For this purpose, the revisions established a new Fellow category, Application Engineer/Practitioner, which recognizes significant contributions in product development, advancement in system, application or operation, project management or construction activity, process development, manufacturing innovation, codes or standards development, or other application of technology. The first individuals recognized in this category were named in the 2006 class of Fellows.

In addition to Application Engineer/Practitioner, Fellow candidates may be nominated in three other categories: Research Engineer/Scientist, Educator and Technical Leaders. An email will be distributed shortly to Section chairs containing a sample article and a MS PowerPoint presentation on the Fellow application process. The nomination period for the 2008 Fellow class will run from August 2006 to 1 March 2007. To learn more about the IEEE Fellow program, visit: www.ieee.org/fellows

### 3.11. IEEE Membership Fee

Dues to increase in 2007. Basic IEEE membership dues will rise next year to US \$123. The \$4 increase in yearly dues is based on the U.S. rate of inflation as measured by the country's Consumer Price Index. Find out more at

http://bmsmail3.ieee.org:80/u/3728/07233935

## 3.12. Welcome To Our New Members And Upgrade Members

From June to September 2006, we have the following new members or newly upgraded members:

#### **Senior Member Grade**

- 1. RODICA RAMER
- JIANGTAO XI
- 3. JUN SHEN
- 4. DR TAT-KUN KWOK
- 5. YOUGUANG GUO

#### **Member Grade**

- 1. RAYMOND WING-FAI LEUNG
- 2. STEPHEN J DAVIS
- 3. MONTSERRAT B ROS
- 4. MARK J DENFORD
- 5. FOK HING CHI TIVIVE
- 6. JOSHUA ROSS WALL
- 7. KA FAI TANG
- 8. CHANGYU YOU
- 9. PETER S BLOCHLEY
- 10. ADRIAN HOBBS
- 11. LIMING ZHU
- 12. DANE M ZONDERVAN
- 13. DANIEL G CUTTING
- 14. RAVI J MCCOSKER
- 15. BIAN LU
- 16. LEE- SHAUN SAW
- 17. TU THANH LE
- 18. MYKHAYLO LYSEVYCH
- 19. MOHIT PATIL
- 20. FEDERICO RUEDA
- 21. WEI WEI SUN
- 22. IVAN L TUNG
- 23. LEITH A ELDER
- 24. DR HUAIFENG ZHANG
- 25. GAVIN M STAPLETON
- 26. STEVEN J FONE
- 27. DR WU DONG
- 28. STUART BRYCE
- 29. DR RICHARD YI DA XU
- 30. SEAN E STARLING
- 31. WARWICK J MYLES
- 32. ALAN M BOUGHEY
- 33. DR STEVEN BLEISTEIN

- 34. HOIL KUNG
- 35. DANIEL YAZBEK
- 36. PROF JIAN YANG
- 37. PEDR K DAVIS
- 38. SHOAIB ALAM
- 39. LINDSAY J GORDON
- 40. DAVID P KOK
- 41. EDWIN KWAN
- 42. CRAIG A ROY
- 43. DEAN A COOPER
- 44. ANDREW KRUMM
- 45. JEREMY J CUBITT
- 46. ANGUS H KEENAN
- 47. MICHAEL J DUMBLE
- 48. HENDRIK H KRUK
- 49. NAYANA A GARDIGE HEWAWASAM T.T.
- 50. DR SEOK-HEE HONG
- 51. PROF ERYK DUTKIEWICZ
- 52. LUKE G REDMOND
- 53. SUDHIR SINGH
- 54. WALDO F MIRANDA
- 55. SITA MADHURI PANYAM
- 56. CRAIG R RODGERS
- 57. DR SUKUNESAN SINNAPPAN
- 58. DEEPAK S SAHAY
- 59. ALLAN MILLS
- 60. BERNARD W GITTINS
- 61. NICHOLAS BRASSEL
- 62. DR NICHOLAS P SHEPPARD
- 63. NICHOLAS L ENGEL
- 64. ROSS A PERUSCO
- 65. IGOR STJEPANOVIC
- 66. KING YAU MICHAEL TAN
- 67. CHRIS C CONSTANCE
- 68. PHILLIP A COHEN
- 69. DONALD A PARKER
- 70. MARK HARGREAVE
- 71. DR SUKKIM CHIN
- 72. JASON KING TAO NG
- 73. ANDREW MCGILL-MORTON
- 74. JOANNE M CURRY
- 75. CHRISTOPHER J DE VANEY
- 76. WAI JACKY KEUNG

#### **Associate Grade**

- 1. SARAH L MIDGLEY
- 2. PETER GEORGE TZANNES
- KASSEM MORAD
- 4. JAMIAN S MASIH
- 5. NICK DAY
- 6. RAJU B ADHIKARI
- 7. MARCELO PEREZ
- ROBERT M LEIDL
- XIAOYUAN TA
- 10. SIMON C MAURICE

#### **Affiliate Grade**

- 1. CAMERON HARDING
- 2. LIBIN FU
- 3. KAI BORNIGER
- 4. ANTHONY J STILL
- PINAKI BASU
- 6. JUI YI WU

#### **Student Grade**

- JOAO CARLOS AYDOS
- 2. PATRICIA MCMANUS
- 3. YI-CHIEN VITA TSAI
- 4. RAVI CHOTALIA
- HAYDEN SCOTT
- SYED I HUSAIN
- JORGEN PEDDERSEN
- 8. JONATHAN S RILEY
- 9. CHEEHAE OK
- 10. WEE HAN LIM
- 11. ENG GHAFFER I KIANI
- 12. SCOTT W ROBERTSON
- 13. ALEN ALEMPIJEVIC
- 14. BRETT L SLATTERY
- 15. TODD M FURNEY
- 16. RICHA ANAND
- 17. MASOOD BEHABADI
- 18. FABIO T RAMOS
- 19. ROBERT ING
- 20. GRAEME D BURNS
- 21. TOBIAS L BRAIN
- 22. XINWEI YOU
- 23. TANJIM RAHMAN
- 24. DAVID L HARRISON
- 25. STEFAN SCHAEFER
- 26. YU TU
- 27. NADEEM AHMED
- 28. THEMBALENKOSI B MATABISWANA
- 29. JERRY CHUN-PING WANG
- 30. KYAW M SOE
- 31. EDWARD MAN
- 32. STEVE CHENG
- 33. WILLIAM T BURKE
- 34. WILLIAM T TIDMARSH
- 35. JIN LONG LEE
- 36. LANCE S COHEN
- 37. ULRICH BEELER
- 38. KAI XIAN LAI
- 39. ALLEN C TSAI
- 40. RAYMOND H LOUIE
- 41. RAJIB CHAKRAVORTY
- 42. GEOFF A HISKENS
- 43. SUHRUD K DESHPANDE
- 44. DANIEL TSE
- 45. TEGAN J MATTHEWS
- 46. CHRISTOPHER ESCOTT
- 47. PENG XIAO
- 48. ANGUS J STEWART
- 49. DZUNG TRAN
- 50. YAN HUANG

- 51. CHUN KIT WONG
- 52. KOON FUNG RICHARD LEE

### 4. Chapter News

### 4.1. EMBS Chapter

I am delighted to announce the establishment of the EMBS chapter as part of the NSW Section of IEEE. Thank you to all those EMBS members that assisted in establishing this new Chapter in NSW and a special thank you to all those who volunteered to be Founding Officers on the first committee for the Chapter.

Over the coming weeks you will see a new link on the NSW Section website to our EMBS NSW chapter. So keep watch at

http://www.ewh.ieee.org/r10/nsw/index.htm !

Make a repeating note in your PDA, phone or diary today to check for updates to our Chapter content on the first day of the month! We will endeavor to ensure we have new content at least once a month.

Ours is the second EMBS Chapter in Australia with a Chapter operating out of the Victorian Section already established for several years.

You may be interested to know that, as at the time of establishing the IEEE EMBS NSW Chapter, there were 70 EMBS members in NSW. Of the 70 members, we have one fellow, seven senior members, two life members, 44 members and 16 students. I am sure that many of our members actually qualify for senior member (or full member from student) but have not yet taken the time to go through the Member Grade Elevation process. So please look at the qualification requirements at

http://ieee.org/web/membership/grade\_elevation/grade\_elevation.html and if you need assistance with locating references, please contact either myself or a member of your Chapter Committee.

We know that broadly our Chapter will service the needs of industry professionals, academics and students with an interest in the domain of EMBS. We will endeavor to develop strategies over the coming months to support all of these areas.

We will be holding our inaugural AGM as part of the IEEE NSW Section AGM. We would like to take this time to find out the interest areas of our members so that we can start to assist and support networking and mentoring within our chapter. Your committee is also planning our inaugural Technical Meeting Speaker Event which we plan to hold before the end of the year. Plans are also already underway for Technical Meetings and conference involvement for 2007.

As a mother of young children and recently returned to

work from maternity leave, I know that fitting in attendance at Technical Meetings during and outside of work hours can sometimes be difficult. If you are even able to arrange to attend one event each year, this may give you networking contacts that you can stay in touch with for the rest of the year.

I look forward to meeting you at one of our upcoming events. Together with your Founding committee we look forward to providing local EMBS support and assistance.



Carolyn McGregor <a href="mailto:c.mcgregor@ieee.org">c.mcgregor@ieee.org</a> Chapter Chair (Founding Officer) EMBS Chapter, NSW Section

### 4.2. Power Engineering Chapter

On June 8 2006, Dr Walter Lachs, Visiting Fellow at the University of NSW and IEEE Fellow, gave the first Electrical Joint lecture at the new Engineers Australia Auditorium in Thomas St, Chatswood. The topic was Power System Stability.

On July 20 2006, Professor Sivaji Chakravorti of Jadavpur University Kolkata India presented a series of three lectures on Modern tools for Impulse Fault Diagnosis in Transformers, Electric Field Analysis in High Voltage Systems and ANN as an Optimization Tool for HV Systems.



All the lectures were excellent and very well presented. If future lectures are of equal standard, then I am sure that it will ensure the continuation of good relations between the joint Institutions.

Tony would like to thank both Dr Lachs and Professor Chakravorti for their efforts and the standard of their presentations. He would also like to thank Engineers Australia for providing the Auditorium free of charge and their help in organizing the events.

A special thanks to John Robinson, IEEE NSW PES

Secretary/Treasurer, for his assistance during the presentations and Dr Graeme Gwilliam for his advice and giving the opening address for Professor Chakravorti's lectures.



Tony Zaglas antonyz@ieee.org
Chapter Chair
Power Engineering Chapter, NSW Section

## 4.3. The 2006 IEEE Region 10 GOLD & Student Congress



The 1<sup>st</sup> Region 10 GOLD Congress was organized with the Region 10 Student Congress and was hosted in Beijing by 4 Universities, the Beijing Section and IEEE Region 10. The aim of the Congress was for GOLD and student members to mutually share knowledge and skills. The first day of the congress was jointly held for students and GOLD members with the following speakers included:

- Michael Lightner, IEEE President, who outlined the future directions of the IEEE
- Jim Riess, SAC Vice Chair, showing student events and programs from around the world
- Darrel Chong, GOLD RAB Committee Chair, talked about the transition from student to GOLD
- Mini S.Thomas, WIE and student activities
  Delhi section, outlined strategies for converting
  student members to GOLD members, also
  talked about WIE and she also gave out
  chocolates.

On day 2, the Congress split into Student and GOLD. We had 17 people attending the GOLD representing Hong Kong, Western Australia, Queensland, Lahore, Malaysia, Bombay, Kerala, Thailand, Singapore, Germany and Japan. The group discussed strategies to improve our GOLD affinity groups. Presentations were made by each group outlining their activities, strategies and problems they faced.

The following list was compiled for what makes GOLD affinity groups strong

- Local section support is vital in sustaining GOLD Affinity Group, and encouraging volunteers to get involved.
- A healthy number of volunteers, with each committee member clear on their role and responsibility.
- Well-defined organizational structure that allows participating individuals the opportunity to achieve and develop soft skills as a volunteer. E.g. Hong Kong section.
- Each GOLD Affinity Group should have a Mission Statement and defined Vision.
- Financial support to add value to membership by holding local activities for members.
- GOLD Affinity Group should address the needs of members locally, by organising events that aren't already made available by other engineering bodies. i.e. if technical events are in plentiful, then fill in the gap by organising social, networking, lifestyle events instead etc.

After the workshop we toured the Great Wall of China. For more information on the congress visit <a href="http://www.r10sc2006.org/gc2006.html">http://www.r10sc2006.org/gc2006.html</a>

The following activities are currently happening for GOLD

- GOLD 10 year anniversary
- GOLD Online Seminars 2006 Past seminars are available for viewing next is on Career Planning in November/December 2006

For more information on GOLD activities please visit <a href="http://www.ieee.org/organizations/rab/gold">http://www.ieee.org/organizations/rab/gold</a>
To get involved in the NSW section GOLD affinity group please contact David Burger, <a href="mailto:dburger@energy.com.au">dburger@energy.com.au</a>

Filita Barker filita kin@yahoo.com.au
Past Chair
GOLD, NSW Section

## 5. Technology & History

## 5.1. Scientists Measure Steps to Universal Wireless Compatibility

The so-called "Tower of Babel" technology that will allow one device to access a variety of wireless communications may come from software defined radio (SDR), according to researchers at the University of Portsmouth, England, who say that with the technology, wireless devices that previously

understood a limited number of standards will be able to communicate freely regardless of frequency or conflicting protocols.

SDR devices use an aerial that picks up radio signals which are transformed with an analogue-to-digital converter so that the information contained in the signals can be understood and manipulated by software onboard the device, researchers say, as opposed to current devices which rely on hardware, rather than software, to extract information from radio signals. Read more:

http://news.bbc.co.uk/2/hi/technology/5382086.stm

## 5.2. GPS Receivers, Network Vulnerable to Solar Flares

Massive outages of all GPS receivers on the day side of the Earth are likely in the event of strong solar flares, according to Cornell University researchers, who say large solar flares expected in 2011 to 2012 could cause "devastating" failures in safety-of-life GPS operations, such as navigating aircraft, stabilizing floating oil rigs and locating mobile phone distress calls.

A Cornell researcher accidentally discovered the effect in September 2005, while investigating irregularities in the plasma of the Earth's ionosphere, when a flare caused his GPS receiver's signal to drop significantly, an effect researchers say was corroborated with data from other receivers operated by the U.S. Federal Aviation Administration and the Brazilian Air Force. Read more:

http://www.physorg.com/news78540515.html

### 5.3. Southern Hemisphere Nations Compete for Giant Radio Telescope

Australia and South Africa are the frontrunners to host a radio telescope with a kilometer-square collection area that will cost more than 1 billion Euro, according to researchers, and will be able to see back to the early universe, test Einstein's theory of gravity and search for signals from alien intelligent life across several hundred thousand lights years. The Square Kilometre Array (SKA) radio telescope will have thousands of antennas spread over 3,000 kilometers, researchers say, and a key technical requirement is very low levels of man-made radio signals, since interference will mask the faint cosmic radio waves the telescope is designed to detect. The eventual host country or countries of the SKA will have to restrict local mobile phone and TV transmissions, according to researchers, transmissions, which currently impede radio astronomy in the developed world. The first elements of the SKA should come online in 2014, researchers say, with the full network of antennas in

operation by 2020. Read more: http://news.bbc.co.uk/2/hi/science/nature/5388690.stm

## 5.4. Why Do Power Systems Still Suffer Collapses?

Preventing extensive and lengthy collapses from unforeseen severe disturbances is the greatest challenge facing the Electricity Supply Industry. The most publicised incident was the collapse of the North Eastern American interconnection that befell in November 1965. The disruption and heavy cost to the community led to the setting up of a Presidential Inquiry. Yet in spite of the considerable effort and engineering resources devoted to this inquiry, the task

of preventing collapses has still not been resolved. This unsatisfactory state of affairs is shown with the numbers of worldwide collapses of large interconnected power systems doubling in each successive decade since 1965. With continuing growth of interconnections, collapses are producing larger financial and social penalties for the communities that lose electricity supplies.

In the 60s, Dr Walter Lachs, IEEE Fellow, commenced his efforts to deal with this challenge and felt that he has devised a practically achievable proposal that could fill a dangerous vacuum in the operation of interconnected power systems, he has as yet, not been able to arrange for its implementation.

### 6. Technical Meetings & Conferences

All members are cordially invited to attend these joint meetings with the Engineers Australia (EA), IEEE, ITEES and IEE. These joint meetings are held at 6.00 pm (with light refreshments at 5:30pm) at the Engineers Australia, Lecture Theatre, Eagle House, 118 Alfred St, MILSONS POINT, NSW unless otherwise stated.

All members should check the latest updates of the Meetings & Conferences a couple of days prior to the actual date at the IEEE NSW News bulletins at <a href="http://www.ewh.ieee.org/r10/nsw/subpages/news/news.htm">http://www.ewh.ieee.org/r10/nsw/subpages/news/news.htm</a> and also the Engineers Australia at <a href="http://sydney.ieaust.org.au/weekevents.html">http://sydney.ieaust.org.au/weekevents.html</a> to prevent any potential disappointment due to last minute changes.

Date	Topic	Speaker	Sponsor (Contact) / Venue
26-Oct-06	The Expanding Role of Permanent Magnet Machines in a Greener, Energy-Efficient Society	Dr. Thomas Jahns  – University of Wisconsin– Madison, USA	Joint IEEE (Ian Boyd) / 8 Thomas, Chatswood
6 Nov 06	IEEE NSW Section Meeting – Executive Committee		IEEE (David Tien) / North Sydney TAFE – TBA (7 to 9pm)
9-Nov-06	ТВА	George Havens- CH2Mhill	Joint IEEE (Ian Boyd) / 8 Thomas, Chatswood
23-Nov-06	ТВА	Dr. Thomas Jahns – University of Wisconsin–Madison, USA	Joint IEEE (lan Boyd) / 8 Thomas, Chatswood
24 Nov 06	IEEE NSW AGM & Dinner		The Boronia Grove, Epping

- TENCON 2006 will be held in Hong Kong Convention and Exhibition Centre from 14 17 Nov 2006.
- The 7th International Conference on Power Electronics and Drive Systems (PEDS'07) will be held in Bangkok, Thailand, from 27 to 30 November 2007
- The 5th International Conference on Research, Innovation and Vision for the Future (RIVF'07), will be held at Hanoi University of Technology, Viet Nam, from March 05 to 09, 2007, under the co-sponsorship of the IEEE Region 10, the EUROCONTROL Joint Research Laboratory CSMC, the Groupe des Ecoles des Télécommunications (GET & ENST) of France, and the Vietnam Union of Science and Technology Associations (VUSTA).
- IEEE Wireless Communications and Networking Conference (WCNC 2007) from 11 15 March 2007 / Hong Kong / <a href="http://www.ieee-wcnc.org">http://www.ieee-wcnc.org</a>

## 7. Continue to Receive Circuit by Post

*Circuit* is currently provided electronically from the IEEE NSW Section Website <a href="http://ewh.ieee.org/r10/nsw">http://ewh.ieee.org/r10/nsw</a>. Members will be notified by email when a new issue is posted on the Website. A printed copy of *Circuit* will only be sent on request by members and for those without an email address.

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