

## "Tackle a Block at a Time".

### In this issue

- No 1 ECSA Under Threat!
- No 2 Magazine Subscription Offer.
- No 3 Membership Statistics.
- No 4 Workshop on National Crises.
- No 5 New B Tech & National Diploma??!!
- No 6 ECSA annual fee & discount to you!
- No 7 Membership Invoices & Notes.
- No 8 News and E Mail
- No 9 E Mail Tips for Telkomsa.net
- No 10 Professional Indemnity Insurance
- No 11 The Joke Column
- No 12 List of Popular Mechanics Subscribers
- No 13 Eskom and Electricity Supply.
- No 14 Eskoms Wind Energy.
- No 15 Solar Powered Electricity.
- No 16 Bio Fuels, Hydrogen Fueled Cars & Planes.
- No 17 Invalid E mail Address List.
- No 18 Unsubscribe Option
- No 19 Disclaimer

### No 1.

**Engineering Council of South Africa under threat of remaining autonomous. Log on to [www.ecsa.co.za](http://www.ecsa.co.za) for the full story and updates.**

**IPET and ECSA have submitted a full response to the new super overall Council for Built Environment Draft.**

**IPET's response will be put on our Web site [www.ipet.co.za](http://www.ipet.co.za)**

### No 2.

#### **Popular Mechanics Magazine Subscriptions.**

Those members who paid for the special offer from the publisher are thanked for their interest and action.

#### **The offer closed at the end of February 2008.**

All the names and addresses of those who accepted and paid for the subscription have been supplied to the publisher. The publisher has indicated that the first magazines were posted out late in April being the May edition. This means those who took up the offer should have received their first magazine by now.

An updated list of the members who took up this offer will be published on our Web site (and is included with this newsletter - see below).

We unfortunately had a few members who paid and or notified us late or paid into our bank account but did not fax copies of deposits to us so we have a few unknowns on the books. We are unable to identify who they were. These and any one who paid after the closing date will not be receiving a magazine. Where we can identify such persons their account will be credited on receipt of proof of payment by and from them.

Thanks from the Editor Viv Nel, Pr Tech Eng

### No 3.

#### **IPET Membership Statistics.**

78% are registered with ECSA.

19% are non-ECSA registered.

43% are White.

5% are Black.

3% are Asian.

1% are Coloured.

And less than 3% are Females!

#### **No 4. WORKSHOP ON ISSUES OF NATIONAL CRISIS.**

The Engineering Council of South Africa, invited IPET to a workshop on Tuesday 6<sup>th</sup> May to discuss the national infrastructure crisis and the launch of the National Engineering Task Force (NETF) on the 8<sup>th</sup> May. Discussions were based on broader issues in the engineering profession and the industry relevant to each party, e.g. energy, water and sanitation, sewerage, roads, etc. and the impact that some of these issues have on the economy of South Africa. The NETF would contribute to the development of a national engineering plan to focus on infrastructure problems as well as the skills crises.

We hope to be informed of developments that we can include in a future Newsletter.

#### **No 5. Workshop on HEQF and new engineering Technology education qualifications. ( A new National Diploma & B Tech Degree)?**

This took place at Emperors Palace Conference Centre near OR Tambo Airport on 1<sup>st</sup> April 2008. Changes and new names are being proposed to the B Tech and ND. The B Tech is to be replaced by a 3 year Bachelors Degree instead of the current 4 year period.

The 3 year National Diploma falls away and is to be replaced by a National Advanced Certificate which is almost at the educational level of the ND but without any experiential component.

Industry and Academics generally could not agree with one another as Academia wants the new system while Industry insists that practical hands on experiential training is absolutely required.

It is interesting to note that as has happened in the past the BSc title never changes but with every new system the B Tech and National Diploma get downgraded to some other title.

ECSA requirements for registration as candidates and professionals will apparently have to change somewhat to cater for the new system.

Despite claims to the contrary it seems that the standard of education and training will drop.

Information from the workshop will be placed on our Website if and when we receive copies of the papers presented.

#### **No 6. Engineering Council of SA (ECSA) Annual Fee 2008.**

ECSA Council approved the following fees for 2008.

Member of recognised Voluntary Association (VA) (such as IPET)	R1248 #
Non members of recognised VA's	R2048 #
Candidate member of recognised VA	R790 ##
Candidate non member of recognised VA	R750 ##

# A discount of R100 on professional fee of R100 will be allowed if payment is received on or before 30 June 2008.

## A discount of R50 on candidate fees will be allowed if payment is received on or before 30 June 2008.

Application fees;

Direct to professional	R3000
Candidate to professional	R1500
Candidate < 1 year	R300
Candidate > 1 year	R750

Admin fee for reinstating registration due to default payments R300

ECSA has posted and distributed invoices by E mail so you should have received yours by now if you are registered with ECSA.

**It pays to be a member of IPET as the discount is R800 for professionals!**

#### **No 7. Membership Invoices and General Notes.**

**IPET's financial year runs from 1<sup>st</sup> April this year to 31 March next year.**

IPET's invoices for 2008 / 2009 are now in the post together with this Newsletter. You will note that the invoice shows the print issue date of May although the fees are actually due in April. Don't worry about the delay just please pay your membership fees as soon as practical.

Yes, the invoices are late this year. The delay was due to so many things happening nearly at the same time with crazy deadlines. Much of the delay was also due to regular scheduled and many **regular unscheduled** power failures! In the two-week period from 21 April to 5 May we had 7 power failures, all which left us with no power for most of the office hours in the days concerned. The second last one was when the incoming cable blew up due to a water leak. Since the splicing in of a new piece of cable we have had only one power failure when our whole block tripped out - probably due to the downpour of rain!

Please note that when we have no power, nothing including our telephone / fax system works! So if you phone and the phone just apparently rings and rings with no answers then you know our power is out -- again.

E mail [djj@africa.com](mailto:djj@africa.com)

And also from;  
 Marsh SA, Marsh Vikela (Pty) Ltd  
 88 Grayston Drive, Sandton, 2196  
 Tel 011 506 5466, Fax 086 636 5359.  
 E Mail Vanessa.kleber@marsh.com.

### No 8. IPET News Is On E-Mail & The Web Site.

The latest news is to be found on the IPET Web Site. If you did not get the last IPET E News sent out a month or so ago then your supplied E-mail address may be a problem. Some Internet Service Providers (ISP) block our E News as they suspect that it is Spam. If you have any E mail News problems take it up with your computer expert and your Internet Supplier or internal Company IT person.

Our database shows that over 90% of all our members have valid E Mail addresses. **If you do not have E-mail then you will miss out on news as we seldom publish a hard copy of news.** For a number of years we have warned members that due to postage costs and the unreliable nature of the postal system we would be going the way of E News and Internet news on our Web site. For those few who do not have E Mail we humbly suggest that you consider getting E Mail or at least visiting an Internet Café occasionally so you can view our Web site. It is cheap and easy and you will find a whole new world of information out there!

Visit [www.ipet.co.za](http://www.ipet.co.za)

### No 11. The Joke Column Warning / Disclaimer.

*Sensitive readers are warned that the following may erroneously be taken to contain sex, violence, strong language, gender, race, ethics etc. Readers are warned not to read or have any of the following read to them. Recommended readers age is limited to 120 and 121 years of age. A further requirement is you must have a sense of humour.*

*Saying Goodnight.*

*In Holland Goeden nagt  
 Australie Night Mate  
 USA Goodnite  
 Duitsland Slafen se wol  
 Suid Afrika Are the doors locked?  
 Is the Elecric Fence on?  
 Is the car locked in the locked garage?  
 Is the alarm activated?  
 Are the Rotweilers outside but safe?  
 Sleep well and don't worry,  
 Eskom will put the lights off!*

### No 12. Members who took up Popular Mechanics subscription.

Members Name	Initials	Members Number
Antunes	JM	1806
Beykirch	RJ	1293
Caruso	P	2604
Du Plessis	JJ	1995
Erasmus	CP	2447
Ewest	WAW	0574
Horton	AJM	1128
Knoll	RO	2112
Lambert	SG	2777
Niehaus	D	2939
Nysschen	JT	2141
Piper	JH	2558
Rooknodien	GG	2862
Schenker	R	2630
Trowbridge	KA	2792
van Wyk	S W	2370
Williams	E G	2745
Wilmot	RE	2021

### No. 9. E Mail Tips For Telkomsa.net Subscribers.

To the Telkomsa.net subscribers who do not get our bulk mailed E News.

Subscribers of the two Telkom email servers must simply activate their anti spam programs on their mother pages. The step by step process is very user friendly, except that when you choose your parameters, simply accept their suggested values.

Absamail and other ISPs have similar rules. Check out your supplier if you experience lack of E news from us.

### No 10. Professional Indemnity Insurance

This is available from;  
 Engineering and Technology Professional Cover Consultants cc underwritten by Manwood Underwriters and Nova Risk Partners Pty Ltd  
 PO Box 50070 Wierda Park, 0149  
 Tel 012 653 1819, Fax 086 660 8306, Cell 083 458 5309,

## No. 13. Eskom & The Electricity Supply.

Eskom's own figures reflect in the table below.

### The future generation capacity and reserve margin outlook

Year	Forecast demand (MW)	New plant (MW/yr)	YearEnd capacity (MW)	Reserve margin (%)	Ideal capacity (15% margin) (MW)	Shortfall (MW)
2008	38287	2024	40548	5.90%	44030	3482
2009	40158	1915	42463	5.70%	46182	3718
2010	41671	1892	44355	6.40%	47922	3566
2011	43238	181	44536	3.00%	49724	5188
2012	44665	1003	45539	2.00%	51365	5826
2013	46430	2422	47961	3.30%	53395	5433
2014	48624	2363	50324	3.50%	55918	5594

The table is based on an increase in demand of 4% per year plus the planned increased capacity over the period.

As one can see from the above, it appears that by 2014, after seven years of investment and building with 30% new capacity, the reserve margin is **planned** to be significantly less than it is in 2008!

This then means that the generation capacity crisis is going to take years to resolve! Demand management and other strategies such as increased fees for supply may be introduced. Independent power production, industrial co-generation and demand management will contribute toward a healthier situation which are not reflected in the table.

Thus while regular load shedding has been temporarily stopped, don't be fooled as the problem still exists. Be prepared, save electricity usage wherever you can (and save on your bill) and get some sort of back up for your lights and fridges at home etc.

## No 14. Eskom's Wind Energy Experiment.

For the past few years Eskom has collected valuable information at the Klipheuvel Wind Energy Demonstration Facility (KWEDF) north of Cape Town. The facility consists of the Danish Vestas V47 660Kw and the V66 1.75Mw unit together with the French Jeumont J48 750 Kw wind turbine.

The three turbines, all different in design, were commissioned in late 2002 and early 2003. They have generated some 15GW over the past few years and yes the facility is connected to the grid. As the turbines are of different designs with different operational characteristics, valuable comparisons can be made for future units.

The turbines are huge sporting 3 blades each, the V66 units blade is 33.5 Metres! Noise measurements before and after commissioning have confirmed that background levels were not increased significantly and the interaction with birds has shown not a single bird strike recorded.

Eskom announced the construction of a 100MW facility on the West Coast near the Oilfants river mouth in 2007. The EIA in this very sparsely inhabited area and commercial activities are progressing and we can expect news updates within months.

The plan is to build 50 turbines, these are normally purchased from Original Equipment Manufacturers (OEM,s) on a turnkey basis.

Generation from wind is a relatively new field of applied engineering technology and significant advances are still being made. The industry standard seems to be a turbine around 2MW.

More than 3500 visitors have visited the site in the guided tours.

### **No 15. Solar Powered Electricity.**

Eskom has been examining the feasibility of building a Concentrated Solar Power Unit which uses a central receiver which gets its sunlight from an array of mirrors (Heliostats). The central receivers thermal energy heats molten salt which is pumped from the receiver to heat exchanger producing steam to drive a turbine. Temperatures of around 600 degrees Celsius are achieved.

There is a possibility that a pilot plant that could generate some 100 MW could be built near Upington or in the northern Cape somewhere.

Although the costs are expected to be some R2.2 billion Rand, the maintenance on such plants, based overseas experience, is relatively low.

*(Ed. So there is light at the end of the tunnel -- OOPs it's sunlight)!*

### **No 16. Bio Fuels, Hydrogen Fueled Cars & Planes.**

Christian Vietoris won the recent feature race of the A1 GP in New Zealand and was the first to do so on a bio-fuel mixture. The fuel is an ethanol based product Hiperflo E 30, sourced from sugar beet in Europe and produced specifically for AI GP by Petrochem Carless, a UK based racing fuel specialist.

The New Zealand Prime Minister Helen Clark said New Zealand was honoured to be the venue for such an important environmental milestone.

The US Indy Car series announced in 2005 that it would run races on a methanol blend from 2006.

Hydrogen powered cars such as the Honda FCX Clarity and Chevrolet Equinox FCE are available in the USA however there are just 36 refueling stations country wide and 66% of these are in California. Federal Government has spent \$1.2 billion on hydrogen in the past five years to create an infrastructure. The results don't appear to be good.

Californias's governor, Arnold Schwarzenegger has promised to spend \$11 million a year on fuel stations so that the state will have 100 stations by 2010. *(Ed. No one going to argue with the Terminator)!.*

Reputably the world's first hydrogen plane recently did three short test flights at an airport near Madrid Spain. The hydrogen is converted to electricity in Fuel cells. Hybrid batteries were used to assist in the take off process.

*(Ed. So progress is there but a bit slow -- any of the oldies out there remember Union Spirit Petrol)?.*

**No 17. The following E mails are invalid and E News to them is undeliverable, rejected, overfull or E mail addresses are unknown! Please Check and advise of a valid and not blocked E Mail address that we can**

## use to send you IPET E News!!

Members Name	Initials	E Mail
Ackerman	C E	chrisa@tut.ac.za
Alexander	C	calexander@ecceng.co.za
Allopi	D	allopidd@dut.ac.za
Ambler	WT	miletus@ohs.co.za
Arries	CS	carries@gibb.co.za
Badenhorst	BG	bgbmkv@absamail.co.za
Badenhorst	AL	thm@webmail.co.za
Basson	SN	bassonsn@techpta.ac.za
Bhembe	SW	sifso_bhembe@yahoo.com
Bosman	H	mbb@mbbpta.co.za
Botha	T	Tertius.Botha@Eskom.co.za
Botha	J	johan.botha@n4w.co.za
Brink	CL	louaan@absamail.co.za
Brittnell	R	fly@brittnell.co.za
Bronkhorst	J	hekkre.bronkhorst@fluor.com
Brown	J	jaques.brown@sasol.com
Bruens	TG	theo.bruens@wspgroup.co.za
Bryant	RW	mailto:robb@pdna.co.z
Butlion	PH	Peter.Butlion@nmmu.ac.za
Charles	T	charloto10@telkmsa.net
Collocott	JH	james@npa.co.za
Combrinck	WH	willemc@taprojects.co.za
Crous	JC	jackiec@dura-piling.co.za
Cullen	CHL	charann@absamail.absa.co.za
De Klerk	BJ	barry@bloenwater.co.za
De Kruijff	AJA	ariiedk@cybertrade.co.za
Drotsky	JG	jan@nt.tritek.ac.za
Du Toit	MM	mmelt@absamail.co.za
Duckham	W N	wayned@rsv.co.za
Elliott	GW	garth.elliott@capetown.gov.za
Ellis	DV	ellisdv@eskom.co.za
Enslin	J	enslinj@vut.ac.za
Essop	H	essoph@pmbcc
Forbes	BE	forbesb@ctech.ac.za
Garrod	KP	kevin.garrod@capetown.gov.za
Goosen	AEF	marykeg@absa.mail.co.za
Govender	V	govenderv@iwcc.duibca.gov.za?
Govender	Y	govenderdt@durban.gov.za
Grobler	AC	acg@vodamail.co.za
Harricombe	R	raphaelh@bks.co.za
Hastie	CGA	caryh@easpc.co.za
Heath	BJ	bromy@iafrika.com
Herbst	JJP	jungle001@aapt.net.au
Herholdt	JH	civil@klerksdorp.org.za
Ireland	RC	ronaldireland@telkomsa.net
Jacobs	R J	rodnejacobs@absamail.co.za
Janse van	PJ	pieter@camdv.co.za
Jansen Van	JG	gawievv@tshawane.gov.za
Jansen van	DJ	jvanvuuren@inwengineering.co.za
Jattiem	M	oeried.jattiem@eskom.co.za
Johl	CP	cjohl@wsu.ac.za
Jones	CW	Jonesb@tygerberg.gov.za

Jones	CW	Jonesb@tygerberg.gov.za
Kasl	K	kkasl@anglotech.co.za
Kleinhans	R	rudi.kleinhans.eskom.co.za
Klopper	SJ	sarel.klopper@eskom.co.za
Koloi	K W	kabelo.koloi@dme.gov.za
Kotze	MJ	mjkotze@anglogold.com
Kruger	C	krigerc@pentech.ac.za
Kruger	PN	pkiu@telkomsa.net?
Laher	R	riyaz@mdcon.co.za
Le Roux	G N	neville.leroux@batemanengineering.co.za
Lotter	MW	wille@lsltek.co.za
MacDonald	NA	neilm@transnet.co.za
Mahne	GG	gawiem@rsv.co.za
Mallinson	RJ	robertm2@telkomsa.net
Manyatsa	P E	pmanyatsa@webmail.co.za
Mhlongo	T	thokozani.mhlongo@transnetprojects.net
Miles	GT	garrickm@rsv.co.za
Moodley	K	Kenneth.moodley@za.sabmiller.com
Moulder	TN	tom@vipconsultingEng.co.za
Mouton	J	jaques.mouton@sasol.com
Mphagi	AC	thohoyandou@v3.co.za
Mtshali	SS	0828069912@vodamail.co.za
Mulder	BJ	Bmulder@v3.co.za
Mulder	JH	Johann.mulder@capetown.gov.za
Mutch	KR	ken,mutch@eskom.co.za
Nathane	TM	motshedin@protekon.co.za
Nel	MJ	maruisn@bks.co.za
Newton	MD	mike@ilembe.org.za
Ngubane	MO	oscar@melco.co.za
Niemand	HJ	mgihjn@puknet.puk.ac.za
Nkonki	LL	likhaya@carifro.co.za
Orsi	RG	rorsi@hatch.co.za
Partington	BA	bryanp@transtel.co.za
Pearse	SJ	stevep@crosswellengineers.co.za
Potgieter	IP	ip.potgieter@absamail.co.za
Pretorius	E	Lpretori@cut.ac.za
Raithule	M W	wilsonr@dihlase.co.za
Ramparshad	N	ramparsns@eskom.co.za
Roditis	N	nroditis.twp.co.za
Ross	BA	bears.st@mweb.co.za
Ruthenavelu	R	ravi@skpeng.co.za
Sassenberg	A-M	ams@isat.co.za
Sathnarayan	S	sathnaryans@iwcc.durban.gov.za
Sieberhagen	GA	gerts2@tshewane.goo.za?
Sillman	C R	colin@fisherfixings.co.za
Singh	B	bharat.singh@kznhealth.gov.za
Smrcka	JR	jsm@botsnet.bw
Storm	HJ	hstorm@pop.co.za
Swanepoel	NJ	njswanepoel@dow.com
Terblanche	JP	jamest@tritek.ac.za
Tyldesley	J	johnty@hotmail.co.za
van der Merwe	C	ingplan@mweb.co.za
van Der Merwe	FB	vandermerwef@velvke.co.za
van der Schyff	TAP	tapvds@ctech.ac.za
van der Spuy	JE	justin@hcon.co.za
van Tonder	FS	stefanV@transnet.co.za

van Zyl	HG	vanzylhg@tut.ac.za
Vilakazi	M	musav@spoonet.co.za
Wentzel	EJ	wentzele@jgi.co.za
Windell	W	wayne@bnrel@co.za
Woollon	AD	andrew@clemcotech.co.za

**No 18. Unsubscribe Option.**

**As a member of IPET you should want to receive the E News. If however u do not want to receive the IPET E News as an E Mail then you have the option to unsubscribe.**

To unsubscribe send an email with ""**IPET unsubscribe**"" in the text to [engineer@netactive.co.za](mailto:engineer@netactive.co.za)

**Number 19. O. & O. E.**

The Institute of Professional Engineering Technology (IPET), its agents, volunteers, workers and members cannot be held responsible for errors in, amendments to, or any damages whatsoever arising from information published in good faith. Opinions expressed by contributors are not necessarily shared by IPET.