



Rujukan Tuan:
Rujukan Kami:

SAHAM TNB DIJUAL SECARA PASAR GELAP

PEMERLOH 29
T Ogos — Tenaga Nasional Berhad (TNB) mengesan kegiatan menjual saham syarikat itu secara 'pasar gelap' oleh sebahagian kakitangannya sendiri, menerusi sindiket yang dia-

Oleh
Yahaya Ahmad
tur pihak-pihak tertentu.

Kegiatan itu dipercayai berlaku berikutan meningkatnya minat pelabur untuk mendapatkan saham TNB, selepas ia mencatatkan nilai harga yang tinggi di pasaran saham tempatan apabila disenaraikan di Bursa Saham

Kuala Lumpur Mac lalu. Pengurus Kawasan Timur TNB, Encik Mohd. Anuar Yusoff ketika mendedahkan perkara itu hari ini berkata, pihaknya mengesan sebahagian kakitangan syarikat itu terlibat dengan kegiatan tersebut, untuk mendapat wang segera. Katanya, sindiket itu yang dianggotai orang luar dan juga kemungkinan kakitangan TNB sendiri, berusaha

LIHAT MUKA 6

SAHAM TNB DIJUAL SECARA PASAR GELAP

memujuk pemegang saham supaya menjual saham milik mereka berdasarkan harga yang dipersetujui secara 'pasar gelap'.

"Kegiatan ini dipercayai meningkat apabila menjelang sambutan Hari Raya atau hari-hari perayaan yang lain," katanya kepada pemberita selepas melawat Pejabat TNB di sini.

Sebelum itu, beliau yang diiringi Pengurus Daerah TNB, Encik Jailani Abbas merasmikan perkhidmatan kaunter pandu masuk TNB Temerloh yang beroperasi hari ini serta kemudahan membayar bil setempat bermula esok.

Mohd. Anuar bagaimanapun enggan menyebut bilangan kakitangan TNB yang terlibat dengan kegiatan itu serta jumlah saham syarikat berkenaan yang telah bertukar tangan setakat ini.

Beliau sebaliknya menasihatkan mereka agar tidak mudah terpedaya dengan pujukan anggota kumpulan itu dan berusaha mengekalkan pegangan saham masing-masing untuk mendapat faedah yang lebih besar.

"Ini termasuklah menerima bayaran dividen dan bonus yang dijangka cukup lumayan hasil daripada pegangan sa-

ham itu, apabila tiba masanya nanti," tambahnya.

Menurut beliau, keghairahan kakitangan TNB menjual saham itu kononnya untuk mendapat keuntungan cepat, sebenarnya merugikan diri sendiri kerana mereka tidak akan menerima faedah untuk tempoh jangka panjang.

Katanya, sikap seperti itu perlu diubah supaya mereka boleh memanfaatkan keuntungan saham untuk kepentingan keluarga, terutama membiayai pelajaran tinggi anak masing-masing.

NEGERA, TANAH MELAYU.
ILAN BANGSAR, KUALA LUMPUR 22-06

120



LEMBAGA LETRIK NEGARA, TANAH MELAYU.
IBU PEJABAT, NO. 129, JALAN BANGSAR, KUALA LUMPUR 22-06

Rujukan Tuan:

Rujukan Kami:

Tenaga's water bill for dams amounts to \$2.7m

By FOONG THIM LENG

IPOH: Tenaga Nasional has to pay the State Water Board \$2.7 million for water used to generate hydroelectric power at the six dams in the state following a revision of rates in January.

Mentri Besar Tan Sri Ramli Ngah Talib said yesterday the amount was \$1.5 million more than that of last year.

Rates for the dams in Temenggor, Bersia, Kenering, Cenderoh, Batang Padang and Sungai Piah were last revised 10 years ago, he said after chairing a state exco meeting.

On a report that Taiwan Pulp and Paper Corporation might move its op-

erations to China if the state government did not allow it to set up a factory on 60ha of land near Tronoh, Ramli said approval would be given if the company complied with requirements of the Department of Environment.

It was reported the state might lose about \$200 million if the Taiwanese firm were to pack up and leave.

Ramli said stringent pollution control was needed as the factory would use a lot of water.

He said the site was near a river and the Government had to ensure that the livelihood of the residents nearby would not be affected by any form of pollution.



Rujukan Tuan:

Rujukan Kami:

Ani Arope Pengerusi Eksekutif Tenaga Nasional

KUALA LUMPUR 10 Ogos —
Tan Sri Dr. Ani Arope telah
dilantik sebagai Pengerusi
Eksekutif Tenaga Nasional
Berhad (TNB) mulai 1 Septem-
ber ini.

Menurut kenyataan ringkas
dari Pejabat Menteri Kewang-
an, bermula dari tarikh itu
juga, Dr. Ani akan meletakkan
jawatannya sebagai Ketua Ek-
sekutif Kumpulan Guthrie
Bhd.

Perlantikan Dr. Ani itu dibu-
at oleh Menteri Kewangan, Da-
to' Sri Anwar Ibrahim sesuai
dengan tatacara syarikat TNB.

Kepercayaan

Sebelum ini, Dr. Ani menja-
di Pengerusi TNB (bukan ekse-
kutif).

Sementara itu, Dr. Ani keti-
ka dihubungi mengucapkan
terima kasih di atas kepercayaan
kerajaan yang melantik be-
liau ke jawatan itu.

Beliau berkata, sebagai
orang yang bekerja atas arah-
an, beliau bersedia memikul
tanggungjawab yang diberi-
kan.

"Saya bekerja di dusun
orang, apabila dipanggil, sebe-
lum subuh saya akan pergi,"
katanya sebagai menyatakan
kesediaan beliau memegang
jawatan yang diberikan itu.

Kemampuan

Menurut Dr. Ani, beliau ha-
nya mengetahui tentang per-
lantikan itu apabila wartawan
Utusan menghubunginya.

Ditanya adakah perlantikan
itu menunjukkan pihak keraja-
an yakin dengan kemampuan-
nya setelah berjaya menyele-
saikan isu Empangan Hidro
Elektrik Pergau baru-baru ini,
Dr. Ani berkata, beliau tidak
layak untuk menyatakan apa-
apa.

"Itu merupakan penilaian
pihak lain, saya tidak akan
menyatakan saya bagus kecu-
ali pihak lain yang menilainya,"
ujar beliau.

Mengenai rancangannya di
TNB, beliau menyatakan, per-
kara itu bukan boleh dibuat
secara spontan, tetapi mene-
gaskan bahawa beliau akan
berusaha menjadikan TNB se-
bagi sebuah syarikat yang ber-
daya maju.



Rujukan Tuan:

Rujukan Kami:

Stesen 11 AUG 1992 janakuasa diswasta

Oleh Wan Sabariah Shikh Ali

KUALA LUMPUR, Ahad — Kerajaan mengambil keputusan menswastakan stesen janakuasa elektrik baru di seluruh negara pada masa depan bagi mengurangkan beban kewangan berikutan kenaikan kos pelaburan untuk membina dan mengendalikannya.

Menteri Tenaga, Telekom dan Pos, Datuk Seri S Samy Vellu, berkata kos pelaburan sesebuah stesen janakuasa elektrik dalam tempoh lima tahun akan datang dijangka meningkat kepada \$20 bilion dan kerajaan tidak mahu terikat dengan beban pinjaman kewangan yang besar.

Berikutan itu, buat permulaan kerajaan memutuskan supaya pembinaan dan pengendalian empat stesen janakuasa baru di Paka, Terengganu; Pasir Gudang, Johor; Lumut, Perak; dan satu lagi di Perlis diserahkan kepada swasta.

Setiap stesen itu akan berupaya menjana 2 x 300 megawatt tenaga elektrik apabila beroperasi kelak.

Samy Vellu berkata demikian kepada pemberita selepas melancarkan Antologi Cerpen ke-7, Persatuan Bahasa Tamil Universiti Malaya (PBTUM), di sini, hari ini.

Menurutnya, Unit Perancang Ekonomi (EPU) Jabatan Perdana Menteri menerima 10 cadangan daripada syarikat swasta untuk mengendalikan stesen janakuasa elektrik, tetapi kerajaan hanya menerima empat saja untuk



SAMY VELLU
...naik \$20 bilion

dilaksanakan setakat ini.

"Pihak EPU kini pada peringkat akhir penyediaan kertas kerja bagi empat stesen janakuasa berkenaan untuk diserahkan kepada Kabinet. Selepas Kabinet meluluskannya, kementerian saya akan mengeluarkan lesen kepada empat syarikat yang diberi kelulusan," katanya.

Samy Vellu juga berkata, pihak pengurusan Tenaga Nasional Berhad (TNB) akan bermesyuarat esok bagi membincang keputusan kerajaan itu.

Antara aspek berkaitan, katanya, ialah bagaimana meningkatkan kecekapan pentadbiran TNB, mengenal pasti keadaan sebenar stesen janakuasa elektrik yang sedia ada

dan cara membantu dan bekerjasama dengan swasta yang akan melaksanakan stesen janakuasa.

Samy Vellu berkata, penswastakan stesen janakuasa elektrik perlu dilaksanakan segera bagi menampung keperluan bekalan tenaga yang semakin meningkat.

"Kita merancang pelaksanaannya siap dalam tempoh dua tahun kerana stesen janakuasa TNB yang ada sekarang tidak berupaya menampung keperluan yang semakin meningkat pada masa depan.

"TNB tidak mengangap keputusan kerajaan menswastakan stesen ini sebagai persaingan kerana ia sendiri mengendalikan banyak stesen. Selain itu, penswastakan hanya untuk stesen baru saja serta masih menggunakan gred TNB," katanya.

Beliau berkata, sebarang keputusan mengenai penswastakan stesen janakuasa elektrik dibuat selepas mengambil kira kepentingan pengguna.

"Kita cuba melaksanakannya tanpa membebankan pengguna tetapi tidak boleh menjamin bahawa tarif elektrik tidak akan naik pada masa depan kerana bergantung kepada kos petroleum dan gas," katanya.

Bagaimanapun, katanya, kerajaan belum memutuskan sama ada syarikat pengendali stesen janakuasa elektrik swasta akan dibenarkan membekalkan elektrik untuk keperluan domestik.

Fa safah korporat diperkenal

BH
05 AUG 1992

Oleh Wan Sabariah Shikh Ali

KUALA LUMPUR, Selasa — Kerajaan akan mengetengahkan falsafah korporat baru bagi sektor swasta yang dilaksanakan mengikut kepentingan, pengalaman, iklim dan keperluan rakyat di negara ini, kata Menteri Kewangan, Datuk Seri Anwar Ibrahim.

Sehubungan itu, katanya, agensi kerajaan yang diswastakan sebagai syarikat korporat yang besar seperti Tenaga Nasional Berhad (TNB) dan Syarikat Telekom Malaysia akan dijadikan contoh utama yang mengamalkan falsafah baru itu.

"Falsafah korporat baru ini tidak semestinya diciplak daripada pengalaman Barat atau Timur.

"Kerajaan tidak akan bertolak ansur untuk memastikan syarikat besar yang diswastakan seperti TNB dan Telekom muncul contoh badan korporat baru yang mempunyai budaya yang boleh dipertanggungjawabkan," katanya.

Anwar berkata demikian ketika berucap di upacara menandatangani perjanjian projek Hidroelektrik Pergau di antara

Kerajaan Kelantan dan TNB di sini, hari ini.

Menerusi amalan falsafah baru itu, katanya, TNB dan badan swasta lain akan mengadakan beberapa rancangan khas yang tidak difikirkan oleh masyarakat korporat sekarang seperti perumahan, pendidikan, latihan dan kebajikan bagi pekerja serta masyarakat di sekitar di kawasan projek besar yang dikendalikan.

"Walaupun TNB beroperasi sebagai sebuah syarikat, tanggungjawab sosialnya tidak akan diabaikan. Keuntungan mesti dicari tetapi ia mesti diimbangi dengan menyempurnakan tanggungjawab sosial.

"Ini bermakna menjamin supaya penduduk yang kurang bernasib baik mendapat perhatian dan pembelaan serta menyediakan keselesaan yang cukup bagi pekerja pada semua peringkat," katanya.

Mengenai perjanjian itu, Anwar berkata, isu projek Hidroelektrik Pergau turut menarik perhatian kerajaan Britain kerana kerajaan

memperolehi pinjaman untuk membiayai projek \$1.3 bilion itu.

Katanya, empangan Hidroelektrik Pergau itu juga adalah projek pertama dan terbesar dikendalikan oleh TNB sejak diswastakan.

"Sebagai pemegang saham terbesar (Menteri Kewangan Diperbadankan), tentulah kita meneliti perkembangannya dan mahu melihat projek berjalan mengikut jadual bagi menambah keyakinan pelabur.

"Dengan selesainya isu ini melalui muafakat, saya yakin projek ini dapat diteruskan tanpa masalah kerana keperluan tenaga elektrik sehingga tahun 2000 kian mendesak," katanya.

Anwar berkata, mengikut kajian, janakuasa elektrik yang ada di negara ini pada masa ini tidak dapat memenuhi keperluan yang semakin meningkat.

Sehubungan itu, katanya, beberapa projek yang dikenalpasti termasuk yang dicadangkan untuk dilaksanakan secara pengswastaan harus dijalankan segera.

Nik Aziz hargai dasar demokrasi

KUALA LUMPUR, Selasa — Menteri Besar Kelantan, Nik Abdul Aziz Nik Mat hari ini berkata perjanjian projek Hidroelektrik Pergau yang ditandatangani di antara Kerajaan Kelantan dan Tenaga Nasional Berhad (TNB), mencerminkan amalan demokrasi yang masih berjalan dengan baik di negara ini.

Menurutnya, perjanjian itu yang dicapai hasil kerjasama dan sikap tolak ansur kerajaan negeri dan TNB turut membuktikan hasrat Kelantan memastikan pelaksanaan projek Pergau membawa rahmat kepada rakyat Kelantan dan negara.

"Kejayaan perjanjian ini juga menggagalkan usaha yang dibuat oleh beberapa pihak tertentu untuk menggagalkan dan memindahkan projek ini ke tempat lain," katanya.

Nik Aziz berkata demikian ketika berucap sebelum menandatangani perjanjian di antara Kerajaan Kelantan dan TNB, di sini, hari ini.

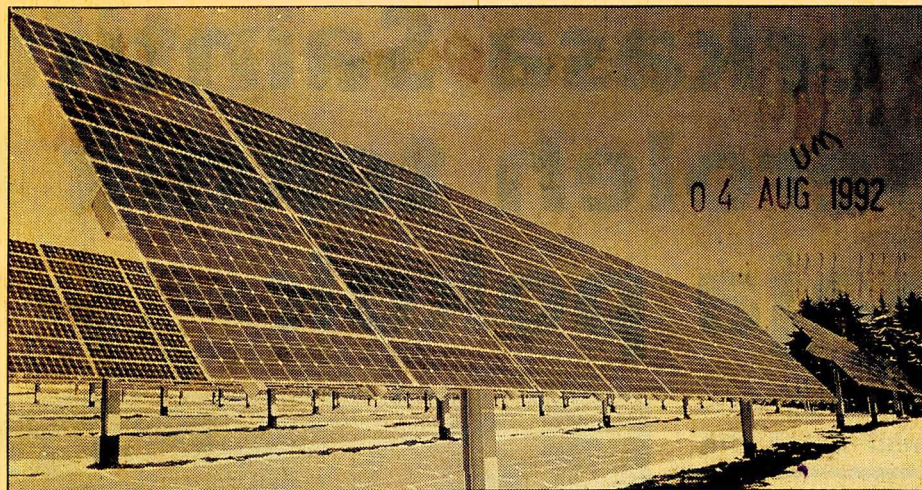
Beliau dan Timbalannya, Abdul Halim Abdul Rahman menandatangani perjanjian itu bagi pihak kerajaan negeri manakala TNB diwakili Pengerusinya, Tan Sri Ani Arope dan Pengurus Besar (Perkhidmatan Korporat) TNB, Datuk Mahmud Badri Basir.

Menurut Nik Aziz, Kerajaan Kelantan mengemukakan cadangan bentuk pembayaran pampasan oleh TNB kepada negeri Kelantan sebanyak \$90 juta sebagai bayaran *ex-gratia* dan kadar bayaran lesen penggunaan tenaga elektrik sekilowatt berupayaan terp

Menurutnya, TNB tidak menerima cadangan itu dan mengemukakan cadangan balas kepada kerajaan negeri \$681,250 setahun bagi bayaran penggunaan air untuk menjana elektrik dan \$100,000 sahaja untuk bayaran *ex-gratia*.

"Perbezaan cadangan ini yang membawa kepada beberapa rundingan selanjutnya dan berasaskan sikap tolak ansur kerajaan negeri dan TNB, satu persetujuan dicapai pada 2 Mac 1992 yang antara lain bersetuju supaya bayaran bagi penggunaan air menjana elektrik ditetapkan sebanyak \$117 juta dalam tempoh 35 tahun," katanya.

Nik Aziz berkata, hasrat kerajaan negeri su-



PROJEK perintis stesen janakuasa suria di Bern, Switzerland yang mampu mengeluarkan kuasa elektrik untuk bekalan 200 rumah.

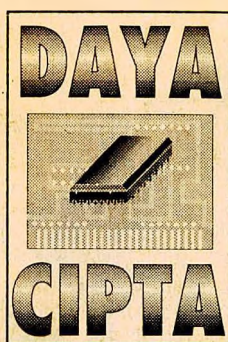
Bekalan elektrik guna kuasa suria

KUALA LUMPUR 3 Ogos — Bekalan elektrik secara besar-besaran dengan menggunakan kuasa suria untuk kegunaan sektor perumahan dan perindustrian akan menjadi kenyataan tidak lama lagi apabila sebuah stesen janakuasa suria dibina di California, Amerika Syarikat tidak lama lagi.

Siemens Ag, syarikat berasaskan industri komputer dan elektronik dari Jerman akan membina stesen tersebut di kawasan berkenaan untuk membantu meningkat bekalan elektrik di kawasan itu.

Projek perintis bekalan elektrik menggunakan kuasa suria syarikat itu sebelum ini dijalankan di Mont Soleil, Bern, Switzerland telah menunjukkan hasil yang berkesan sejak dimulakan pada awal tahun ini.

Stesen percubaan itu mem-



punyai kapasiti menghasilkan 500 kilowatt kuasa elektrik setahun dan akan ditingkatkan kepada 800,000 kilowatt yang mencukupi untuk bekalan 200 buah rumah.

Projek itu merupakan percubaan dan penyelidikan ke atas dayamaju kuasa suria sebagai sumber kuasa. Sebagai syari-

kat yang sedang mencuba menggalakkan penggunaan kuasa suria sebagai sumber kuasa Siemens Ag akan memindahkan teknologinya ke California yang dirasakan sesuai untuk kawasan sekitarnya.

Stesen percubaan di Bern itu terletak di kawasan pergunungan Alps setinggi 1,200 meter dari aras laut dan meliputi kawasan seluas tiga buah padang bola. Stesen ini menerima cahaya matahari dan menukarnya terus kepada kuasa elektrik dan terbukti sangat berjaya setakat ini.

Jika projek stesen janakuasa suria secara komersial yang pertama di California itu berjaya kemungkinan projek ini dapat diperluaskan ke negara lain terutamanya di kawasan yang mempunyai iklim panas.



LEMBAGA LETRIK NEGARA, TANAH MELAYU.
IBU PEJABAT, NO. 129, JALAN BANGSAR, KUALA LUMPUR 22-08

Rujukan Tuan:

Rujukan Kami:

Bonus TNB

ikut 5 SEP 1992

sistem prestasi

KOTA BHARU, Isnin — Bayaran bonus dan kenaikan pangkat bagi kakitangan Tenaga Nasional Berhad (TNB) mulai tahun ini, akan ditentukan mengikut kaedah baru, iaitu Sistem Prestasi Penilaian Perkhidmatan Kakitangan.

Pengurus Besar Hal-Ehwal Korporat TNB, Wan Hussein Wan Endut, berkata hanya kakitangan yang menjalankan tugas memuaskan dan rajin saja berhak menerima bonus dan kenaikan pangkat.

“Bagi kakitangan yang tidak produktif dan mempunyai masalah disiplin tidak akan mendapat ganjaran, sebaliknya mereka akan terus diasingkan daripada kakitangan yang cekap,” katanya, di majlis makan malam tahunan jabatan itu, di sebuah hotel terkemuka di sini, semalam.

Wan Hussein berkata, sistem baru itu lebih menguntungkan terutama jika mereka dapat bekerjasama sebagai satu pasukan.

Katanya, matlamat utama sistem itu ialah meningkatkan prestasi kakitangan jabatan kepada masyarakat setempat, terutama penduduk di negeri ini.

Beliau menasihatkan kakitangan supaya jangan menjual saham mereka kerana saham TNB sedang meningkat.

Ini berikutan, Bank Bumiputera Malaysia Berhad (BBMB) dan Bank Islam Malaysia Berhad melanjutkan bayaran tempoh permulaan untuk pinjaman saham selama tiga tahun.



Potensi tenaga suria sebagai sumber elektrik

Oleh
Dr. Mohd Noh Dalimin

BEKALAN elektrik di negara kita ketika sebelum peperangan dunia kedua, hanya tertumpu kepada bandar-bandar utama sahaja. Pada hari ini, ia telah berkembang hampir ke seluruh negara oleh Tenaga Nasional Berhad (TNB) di Semenanjung, SESCO di Sarawak dan LLS di Sabah.

Permintaan elektrik di Malaysia amnya meningkat dari tahun ke tahun, dan akan terus berkembang sehingga ia mencapai anggaran 2000MW pada tahun 1995.

Kegunaan elektrik di Semenanjung, tertumpu kepada tiga sektor utama iaitu, sektor perindustrian, sektor bandar dan perumahan, dan juga sektor pedalaman atau luar bandar.

Kemudahan bekalan elektrik untuk daerah pedalaman terutama di Sabah dan Sarawak masih belum dapat dipenuhi dan penduduk bergantung kepada sumber lain seperti kayu, minyak tanah, bateri dan gas.

Baterilah satu-satunya sumber yang dapat membekal elektrik untuk jangka masa pendek bagi keperluan membunyikan radio dan peralatan elektrik berkuasa rendah yang lain.

Di kawasan bandar, pekan kecil serta kawasan perkampungan yang berdekatan dengan bandar atau jalan raya, di mana terdapat bekalan elektrik, penduduk dapat menggunakan peralatan elektrik seperti kipas, sistem hawa dingin, radio, TV dan juga perusahaan kecil seperti menjahit, kimpalan dan lain-lain.

Pembangunan pesat serta pembekalan elektrik yang meluas telah menyebabkan pertumbuhan yang tinggi kepada permintaan bekalan dan dari data di atas jelaslah bahawa elektrik adalah jenis



tenaga yang sangat sesuai untuk kegunaan masyarakat baik di bandar mahupun di luar bandar.

Pada masa ini, tenaga elektrik dijana melalui stesen janakuasa diesel, gas, arang batu dan juga hidro milik TNB, SESCO atau LLS. Janakuasa diesel, arang batu dan gas memberikan tenaga sebanyak dua pertiga sementara selebihnya dari stesen hidro.

Terdapat usaha untuk menambah bekalan dari sumber hidro, seperti melalui projek Bakun Sarawak (2400MW), projek Pergau (600MW) dan beberapa lagi.

Dengan terlaksananya projek-projek tadi, maka lebih ramai lagi penduduk akan dapat menikmati kemudahan bekalan elektrik.

Jarak

Walau bagaimanapun, di kawasan pedalaman, elektrik tidak mudah dibekalkan. sistem perhubungan yang tidak mudah, permintaan elektrik yang kecil di tempat, serta jarak yang jauh antara satu kampung dengan kampung yang lain, serta jarak antara rumah yang jauh, bekalan elektrik tidak mudah dibekalkan kepada penduduk tersebut, tanpa melibatkan kos yang tinggi.

Untuk mengatasi masalah ini, satu alternatif yang sangat memungkinkan adalah dengan memajukan atau menggunakan secara berkesan tenaga yang sedia ada tetapi belum dimanfaatkan sepenuhnya iaitu Tenaga SURIA.

Tenaga Suria: Matahari sebagai sumber tenaga, bersinar sepanjang tahun dan negara menerima tenaga sejumlah sekitar 3 hingga 5 kilowatt jam untuk setiap permukaan seluas 1 meter persegi, dalam satu hari (3-5 KWjam/m²/hari).

Sinaran matahari tidak menghabiskan, tidak membawa pencemaran kepada alam sekitar, dan tidak terjejas oleh embargo antarabangsa juga peperangan yang berlaku, dan sudah sedia dikirim ke merata-merta tempat di mana ada kehidupan.

Kaedah

Sumber tenaga matahari sudah lama digunakan oleh manusia di bumi ini. Untuk masyarakat kita di bandar atau di luar bandar tenaga suria digunakan untuk mengeringkan pakaian yang dicuci, menjemur hasil panen, serta berbagai lagi aktiviti kehidupan seharian.

Terdapat dua kaedah komersil yang dijual di negara kita. Yang pertama ialah sistem suria air panas (*solar hot water system*), dan kedua ialah sistem fotovolt (Photovoltaic System).

Untuk sistem yang dapat membekalkan tenaga elektrik, diperlukan sistem fotovolt.

Sistem Fotovolt: Sistem ini adalah mudah. sel yang diperbuat dari Silika (berasal dari pasir), bila didedahkan kepada cahaya matahari (atau cahaya lampu) akan memberikan arus elektrik seperti bateri lampu suluh kita.

Untuk satu sistem kecil, kita boleh beli di pasaran hari ini seperti jam tangan

solar, kalkulator solar, jam besar solar, dan berbagai jenis barangan lain yang diminati.

Untuk sistem yang lebih besar, terdapat sistem untuk bekalan elektrik di rumah, bekalan elektrik untuk mengepam air, untuk lampu jalan, untuk talian telefon luar bandar, stesen pemancar radio di kawasan pedalaman, dan lain-lain lagi.

Di negara kita, terdapat beberapa projek sederhana, bekalan elektrik dengan sistem fotovolt. 58 buah rumah di Pulau Aur, Johor, rumah panjang Penan di Lusong Laku, Belaga, atau projek bantuan negara Belgium di Batu 52, Sungai Engkabang Jalan Kuching-Serian, dan lain-lain lagi.

Terdapat juga sistem bekalan air dari dalam tanah, dengan pam yang dibekalkan sumber elektrik dari sistem fotovolt.

Jelaslah sistem fotovolt dapat memberikan bekalan elektrik kepada penduduk, terutama di kawasan luar bandar.

Negara kita menerima sinaran suria yang mencukupi untuk membekalkan elektrik di kawasan-kawasan pedalaman, di mana pengangkutan diesel dan bahan bakar lain adalah sukar. Juga terdapat keadaan sekeliling yang tidak memungkinkan sambungan kepada grid utama dengan mudah dan tanpa melibatkan kos yang tinggi.

Oleh kerana sistem fotovolt adalah satu teknologi baru, maka banyak usaha dan waktu diperlukan untuk memperkembangkan serta memastikan agar sistem ini dipilih dengan betul dan menepati keperluan setempat serta mampu beroperasi dengan berkesan. Insya-Allah!



Rujukan Tuan:

Rujukan Kami:

Pengarah Eksekutif baru



MOHD ARIFFIN RAHMAN
... tugas baru

KUALA LUMPUR, Rabu — Tenaga Nasional Berhad (TNB) melantik Datuk Mohd Ariffin Abdul Rahman sebagai Pengarah Eksekutif dan Pengerus Besar Kanan Operasi syarikat, mulai semalam.

Mohd Ariffin adalah Pengurus Besar Perkhidmatan Pengguna TNB dan memangku tugas sebagai pengarah urusan apabila Pengarah Urusannya, Datuk Ibak Ibrahim tamat tempoh perkhidmatan.

Perlantikan Mohd Ariffin itu diumumkan oleh Pengerusi Eksekutif TNB, Tan Sri Dr Ani Arope, ketika mengadakan

pertemuan pertama dengan semua pegawai kanan TNB di sini hari ini, selepas menjawat pengerusi eksekutif, semalam.

Dr Ani berkata, Menteri Kewangan sebagai pemegang saham melantik Mohd Ariffin sebagai Pengarah Eksekutif dan Pengurus Besar Kanan Operasi TNB berkuatkuasa sejak semalam.

Ditanya mengenai laporan saham TNB dijual secara pasaran gelap, Dr Ani berkata, perkara itu tidak berlaku.

Bagaimanapun, katanya, sebagai pemilik saham, mereka bebas menggunakan budi bicara

memutuskan kedudukan saham masing-masing.

"Pekerja berhak membuat keputusan kerana ia membabitkan kedudukan ekonomi masing-masing. Mereka mungkin menjual sebahagian saham untuk meringankan beban daripada terus menanggung bayaran hutang dan baki yang disimpan," katanya.

Mengenai kedudukannya sebagai Pengerusi Persatuan Penanam Pertanian Malaysia (MAPA), Dr Ani berkata, beliau akan terus memegang jawatan itu kerana beliau juga Pengerusi syarikat perladangan, Highlands Lowlands Berhad.

TNB diarah bimbing usahawan

Oleh Norazmi Abdul Talib

KUALA LUMPUR, Rabu — Tenaga Nasional Berhad (TNB) diarah membantu usahawan tempatan memajukan keupayaan pengeluaran agar mampu membekalkan keperluan komponen dan peralatan elektrik TNB bernilai kira-kira \$500 juta setahun.

Pengerusi Eksekutif TNB, Tan Sri Dr Ani Arope, berkata langkah itu membabitkan program penyelidikan dan pembangunan TNB, mengenal pasti bentuk serta jenis barangan berkenaan yang boleh dikeluarkan secara tempatan.

"TNB boleh membantu membimbing usahawan tempatan mengeluarkan barangan itu agar syarikat

katnya tidak terlalu bergantung kepada barangan import lagi.

"Kita perlu menerokai teknologi tinggi dengan memajukan usahawan tempatan kerana TNB menggunakan komponen serta peralatan elektrik setiap hari," katanya kepada pemberita selepas mengadakan perjumpaan pertama dengan pegawai kanan TNB di ibu pejabat syarikat itu di sini, hari ini, selepas dilantik sebagai pengerusi eksekutif mulai semalam.

Menurutnya, kejayaan usahawan tempatan membekalkan komponen serta peralatan elektrik ini akan mewujudkan banyak peluang pekerjaan.

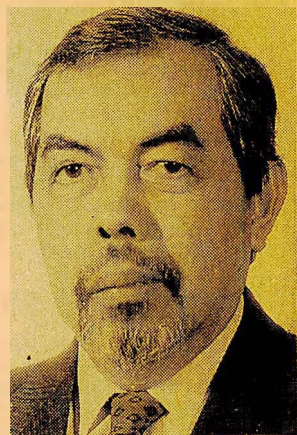
Dr Ani berkata, TNB

sudah menandatangani perjanjian mendapatkan bekalan arang batu dari Sarawak semalam bagi mengurangkan pergantungan kepada 100 peratus import.

Katanya, walaupun arang batu tempatan bermutu rendah, ia boleh dicampurkan dengan arang batu import.

"Kita mahu menggunakan arang batu tempatan walaupun bekalan sekadar 10 peratus dan baki bergantung kepada import," katanya.

Antara perkara lain yang turut diarahkan untuk dilaksanakan oleh TNB ialah mengkaji semula dasar perniagaan, pengurusan sumber tenaga dan catuan bekalan.



DR ANI AROPE
... peluang kerja

Dr Ani berkata, TNB perlu mempunyai struktur organisasi yang menyokong kedudukan korporat syarikat ini, mengisi kekosongan jawatan serta mewujudkan kecemerlangan bekerja secara berpasukan dan mengatasi segera masalah kekurangan bekalan elektrik di sesuatu kawasan.

"Saya mahu TNB berjaya melaksanakan sesuatu projek tidak melebihi 18 bulan apabila diluluskan oleh lembaga pengarah," katanya.

Dr Ani juga mahu kaki tangan TNB mampu meningkatkan produktiviti dengan nisbah daripada seorang pekerja dan 120 pelanggan kepada 150 pelanggan.



LEMBAGA LETRIK NEGARA, TANAH MELAYU.
IBU PEJABAT, NO. 129, JALAN BANGSAR, KUALA LUMPUR 22-06

Rujukan Tuan:

Rujukan Kami:

Elektrik: PM arah siasat segera

02 OCT 1992

Oleh Wan Hamidi Hamid dan M Thillinadan

SUBANG, Khamis — Datuk Seri Dr Mahathir Mohamad berkata kejadian bekalan elektrik yang terputus di seluruh Semenanjung dua hari lalu tidak sepatutnya berlaku dan mahu siasatan segera dijalankan untuk mengenal pasti puncanya.

Perdana Menteri berkata kerajaan perlu menyiasat peristiwa itu untuk mengetahui punca berlaku kejadian yang menyebabkan kerugian berpuluh-puluh juta ringgit, khususnya di sektor perindustrian.

"Kita kena siasat apa sebab kejadian itu. Sepatutnya ini tidak berlaku. Kita mesti tahu apa sebabnya supaya tindakan boleh diambil untuk mengelak perkara ini daripada berulang," katanya kepada pemberita selepas kembali daripada lawatan rasmi ke Ireland di Lapangan Terbang Antarabangsa Kuala Lumpur, di sini petang ini.

Selasa lalu, bekalan elektrik di Semenanjung terputus mulai jam 3.16 petang berikutan empat talian elektrik di pusat penyaluran Telok Kalong, Kemaman, Terengganu terpelantik disebabkan ribut petir.

Sementara itu, Pengarah Eksekutif dan Pengerus Besar Kanan Tenaga Nasional Berhad (TNB),

Datuk Mohd Ariffin Abdul Rahman dalam sidang akhbar petang ini menjelaskan 95 peratus bekalan elektrik di Semenanjung Malaysia yang terjejas sejak dua hari lalu, sudah dipulihkan. Keadaan dijangka pulih sepenuhnya lewat petang esok.

Mohd Ariffin berkata TNB kini menjana 4,360 megawatt dan mampu memenuhi semua permintaan ke seluruh negara, kecuali pada waktu penggunaan optimum di antara jam 10 pagi dan 12 tengah hari dan 2 petang hingga 4 petang.

Menurutnya, jumlah bekalan elektrik peringkat optimum diperlukan ialah 4,400 megawatt. Jumlah itu dijangka dicapai menjelang lewat petang esok apabila keupayaan beberapa stesen janakuasa di baik pulih.

Beliau berkata, Stesen Janakuasa Tuanku Jaafar, Port Dickson dan Stesen Janakuasa Prai akan mengeluarkan 140 megawatt mulai lewat petang esok bagi membolehkan TNB menjana 4,500 megawatt secara keseluruhan.

"Penjanaan 4,500 megawatt adalah lebih daripada mencukupi tetapi empat stesen lain akan turut di baik pulih mengikut jadual penyelenggaraan

untuk menjana bekalan berlebihan bagi menghadapi sebarang kemungkinan," katanya.

Stesen Janakuasa Jambatan Connaught, Klang akan mengeluarkan 130 megawatt pada 3 Oktober, Stesen Janakuasa Sultan Idris II, Cameron Highlands (50 megawatt) pada 4 Oktober, Stesen Janakuasa Jambatan Connaught (100 megawatt) pada 5 Oktober dan Stesen Janakuasa Sultan Iskandar, Pasir Gudang (87 megawatt) pada 7 Oktober.

Mohd Ariffin berkata, keupayaan janaan bekalan elektrik pada 7 Oktober akan mencapai 4,847 megawatt di Semenanjung iaitu lebih 487 megawatt daripada yang diperlukan pada waktu penggunaan optimum.

Menurutnya, sejak dua hari lalu TNB sudah meminta kerjasama kilang besi Perwaja Steel, Malayanawata, Amalgamated Steel of Malaysia, Southern Iron dan Antara yang menggunakan 180 megawatt supaya menghentikan pembakaran besi secara Relau Arka Elektrik (Furnace) bagi mengelakkan penggunaan bekalan elektrik secara maksimum.

"Kami juga meminta pihak kilang, khususnya ki-

LIHAT MUKA 2



Rujukan Tuan:

Rujukan Kami:

Elektrik terputus: TNB rugi \$8 juta

DARI MUKA 1

lang yang mengeluarkan sistem hawa dingin turut mengurangkan penggunaan tenaga.

"Semua kilang besi dihubungi oleh Bilik Kawalan di Kuala Lumpur manakala kilang lain oleh pengurus kawasan di negeri masing-masing," katanya.

Mengenai siasatan punca bekalan elektrik terputus, beliau berkata, komputer mengesan kejadian terpelantik disebabkan ribut petir di antara Stesen Janakuasa Sultan Ismail, Paka dan stesen kecil di Telok Kalong, Terengganu.

Menurutnya, jurutera sudah dihantar mengesan kawasan berlaku kejadian itu yang merangkumi kira-kira 40 kilometer tetapi setakat ini belum membawa hasil.

Mohd Ariffin berkata, TNB kerugian \$8 juta di segi pendapatan kerana bekalan elektrik terputus sejak dua hari lalu.

"Jika seluruh negara tidak mendapat bekalan elektrik 24 jam, TNB akan rugi pendapatan \$10 juta sehari. Bagaimanapun, tindakan segera TNB memulihkan 35 peratus bekalan pada jam 8 petang pada hari kejadian dapat mengelakkan kerugian besar," katanya.

Mengenai bekalan elektrik ke Singapura berikutan letupan Stesen Janakuasa Seneko, Woodlands pada hari sama, beliau berkata, Stesen Janakuasa Pasir Gudang membekalkan elektrik di antara jam 9 pagi dan 9.55 pagi tetapi dihentikan kerana tidak berupaya.

Mohd Ariffin menasihatkan pengguna terus menjimatkan tenaga elektrik, terutama alat hawa dingin dan motor di waktu puncak.

Pengguna yang belum mendapat bekalan elektrik sejak kelmarin juga dinasihat menghubungi bilik gerakan TNB ber-



Rujukan Tuan:

Rujukan Kami:

TNB rugi \$5 juta akibat bekalan elektrik terputus

UM
30 SEP 1985

Oleh
Zulkiflee Bakar

KUALA LUMPUR 30 Sept. — Tenaga Nasional Berhad (TNB) mengalami kerugian \$5 juta akibat bekalan elektrik yang terputus di hampir keseluruhan Semenanjung Malaysia petang semalam.

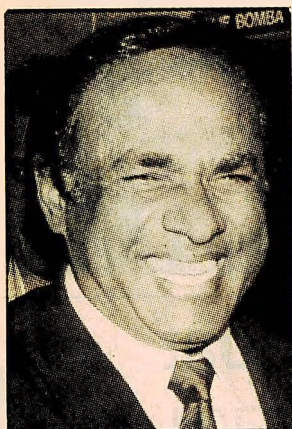
Menteri Tenaga, Telekom dan Pos, Dato' Sri Samy Vellu berkata, jumlah kerugian itu akan meningkat kepada \$6 juta sehari jika masalah yang sama berlanjutan.

"Oleh itu, TNB sedang berusaha untuk memperbaiki talian penghantaran di Teluk Kalong dan Paka di Terengganu yang menjadi punca utama masalah ini," katanya kepada pemberita pada sidang akhbar di pejabatnya hari ini.

Beliau memberitahu, sehingga pukul 11.00 pagi ini, TNB hanya dapat menjangka 3,415 megawatt elektrik sahaja berbanding 4,500 megawatt yang biasa dijana.

Samy menjelaskan, kawasan perumahan yang masih belum menerima bekalan elektrik dijangka akan menerimanya dalam masa 12 jam lagi, manakala kawasan perindustrian 24 jam lagi.

"Selain itu, saya juga menerima laporan bahawa pusat janakuasa di Pasir Gudang dan Port Dickson kini



SAMY VELLU

dalam proses menjanakusakan semula bekalan elektrik," jelasnya.

Menjawab satu soalan, beliau menafikan bahawa kejadian bekalan elektrik terputus semalam berpunca daripada kebakaran yang berlaku di Stesen Senoko, Singapura.

"Kejadian itu tidak ada kaitan dengan bekalan elektrik negara ini, bagaimanapun saya mengakui pada pukul 9.00 hingga 10.00 pagi semalam, kita memang ada membekalkan elektrik kepada mereka tetapi bekalan itu ditarik balik apabila kadar penggunaan di Semenanjung Malaysia meningkat," katanya.

Samy menegaskan, Semenanjung Malaysia hanya menghadapi masalah kira-

kira pukul 3.16 petang, sedangkan bekalan elektrik dari Pasir Gudang, Johor ke Singapura diberi pada pukul 9 hingga 10 pagi.

"Kita memang mempunyai perjanjian dengan Singapura iaitu jika mereka memerlukan tenaga elektrik yang lebih mereka akan mengambil dari kita, begitulah sebaliknya," katanya.

Beliau seterusnya berkata, perjanjian kerjasama itu telah dibuat dengan dua buah negara iaitu pada tahun 1981 dengan Thailand dan 1985 dengan Singapura.

Petir

Beliau juga mengulangi bahawa punca utama bekalan elektrik terputus semalam ialah panahan petir ke atas kabel penghantaran antara Teluk Kalong ke Paka di Terengganu.

"Akibat panahan itu, empat talian penghantaran telah rosak dan ini merupakan pengalaman pertama TNB kerana sebelum ini kerosakan hanya berlaku kepada dua talian penghantaran sahaja iaitu pada tahun 1985," ujarnya.

Ditanya kos untuk memperbaiki kerosakan tersebut, Samy berkata, ia sukar ditaksirkan.

"Ini kerana apabila berlaku gangguan menyeluruh (massive tripping) semua janakuasa yang terlibat akan berhenti secara automatik

dan ia mengambil masa yang panjang untuk dijanakan semula," katanya.

Samy menegaskan, TNB memang sentiasa berusaha mengelakkan kejadian serupa ini berlaku termasuklah menggunakan peralatan dan sistem paling canggih.

"Tetapi dalam keadaan semalam, apa yang berlaku adalah kuasa Tuhan, kita tidak boleh buat apa-apa," tegasnya.

Ditanya adakah mesyuarat Kabinet membincangkan masalah itu, Samy berkata, beliau diarahkan menyediakan laporan penuh mengenai kejadian itu bagi dibentangkan dalam mesyuarat minggu depan.

"Saya telah mengarahkan pegawai-pegawai TNB menyediakan butiran lengkap untuk laporan itu termasuklah kerugian yang dialami, jaminan yang boleh diberikan supaya ia tidak berulang dan cara untuk mengatasinya," katanya.

Samy juga menjelaskan, kerajaan tidak dapat membayar kerugian yang ditanggung oleh orang perseorangan atau sektor-sektor perindustrian akibat kejadian semalam.

"Kementerian meminta maaf di atas apa yang berlaku semalam dan pada masa ini TNB sedang berusaha dengan gigih untuk memulihkan keadaan," jelasnya.

ELEKTRIK TERPUTUS SEMENANJUNG LUMPUH

Oleh
**Zulkifli Bakar dan
Noraini Nordin**

KUALA LUMPUR
29 Sept. — Hampir keseluruhan Semenanjung Malaysia 'lumpuh' petang ini apabila bekalan elektrik terputus pada pukul 3.16 mengakibatkan keadaan kelim-kabut dan kerugian berjuta ringgit.

Panahan petir ke atas kabel hantaran antara Teluk Kalong ke Paka di Terengganu disyaki sebagai punca kerosakan.

Bagaimanapun, sehingga tengah malam ini hampir 80 peratus daripada kerosakan telah berjaya dibaiki dan pihak Tenaga Nasional menjangka keseluruhan bekalan elektrik akan pulih kembali menjelang pagi esok.

Kira-kira 50 peratus daripada Bandar Raya Kuala Lumpur yang bergelap sejak petang juga menyinar kembali menjelang tengah malam ini setelah bekalan elektrik disambung semula.

Singapura juga hadapi masalah yang sama, mulai pukul 9.15 pagi, apabila Stesen Janakuasa Senokonya terbakar.

Gangguan bekalan elektrik yang melumpuhkan Semenanjung Malaysia ini bagaimanapun tidak melibatkan Terengganu, Kelantan dan Perlis.

Keadaan kecoh dan kelim-kabut yang paling teruk di

laporkan berlaku di ibu kota. Lampu-lampu isyarat jalan yang tidak berfungsi mengakibatkan kesesakan lalu lintas yang disifatkan paling buruk walaupun polis menempatkan anggota-anggotanya.

Pusat-pusat membeli-belah, panggung-panggung wayang serta pasar-pasar raya, semuanya ditutup. Bank-bank juga ditutup awal.

Kilang-kilang serta pejabat-pejabat ditutup awal dan para pekerja di bangunan-bangunan pencakar langit terpaksa turun dengan tangga kerana lif tidak berfungsi.

Perniagaan yang terpaksa ditutup mengakibatkan kerugian berjuta ringgit.

Hospital, lapangan terbang dan beberapa jabatan kerajaan terpaksa menggunakan generator sendiri untuk beroperasi.

LIHAT MUKA 2

TERPUTUS SEMENANJUNG LUMPUH

Janakuasa elektrik yang di Sultan Mahmud, hanya mampu menampung kuasa Hidro Sultan yang menampung

Janakuasa elektrik di Semenanjung, tambah belia.

Ini kerana pengaliran di talian elektrik Kelantan hanya mampu menampung 4,000 megavolt sahaja tetapi apabila kerosakan ini berlaku ia mengalami *over load* sehingga 4,400 megavolt.

Petir

ke Semenanjung di Kelantan dan lagi di Pahang,"

petir, *over load* akan sakan di seluruh

"Kejadian seumpama ini pernah berlaku pada Jun 1985 tetapi ia disebabkan oleh kebakaran di bawah talian elektrik di Terengganu," katanya kepada pemberita di sini.

Mohd. Ariffin berkata, TNB memerlukan sekurang-kurangnya 10 jam untuk membaiki kerosakan yang telah berlaku.

"Ini dilakukan secara berperingkat-peringkat di seluruh Janakuasa elektrik di seluruh negara dan bekalan elektrik dijangka pulih semula kira-kira jam 3 pagi," katanya.

Mohd. Ariffin juga memberitahu, TNB mempunyai lapan sistem Janakuasa elektrik hidro, dua gas dan lima menggunakan minyak.

Sementara itu, Menteri Tenaga, Telekom dan Pos, Dato' Sri Samy Vellu berkata, semua kakitangan TNB sedang berusaha bersungguh-sungguh memulihkan keadaan.

"Kami juga telah mengarahkan Angkatan Tentera Malaysia (ATM) dan Polis membuat kawalan keselamatan bagi mengelakkan sebarang kejadian yang tidak diinginkan.

30 SEP 1992

TNB diarah atasi krisis elektrik

Oleh Khalid Amin

KUALA LUMPUR, Selasa — Kerajaan mengarahkan Tenaga Nasional Berhad (TNB) menubuhkan Jawatankuasa Pengurusan Krisis Elektrik bagi mengatasi masalah gangguan bekalan elektrik yang disifatkan sebagai serius di seluruh negara sejak awal bulan ini.

Menteri Tenaga, Telekom dan Pos, Datuk Seri S Samy Vellu, berkata jawatankuasa itu yang diketuai Pengerusi Eksekutif TNB, Tan Sri Dr Ani Arope ditugaskan untuk menyelesaikan masalah itu segera.

Katanya, langkah itu bertujuan menyelesaikan krisis tenaga elektrik yang melanda negara ini, berikutan pertambahan permintaan dalam sektor perkilangan.

"Selain itu, masalah gangguan bekalan elektrik khususnya di kawasan perkilangan dan perumahan disebabkan TNB sedang melaksanakan kerja baik pulih jentera dan mesin di beberapa tesen janakuasa elektrik di seluruh negara.

"Sehubungan itu, gangguan elektrik di tempat tertentu tidak dapat dielakkan kerana kira-kira 1,034 megawatt tidak dapat dibekalkan seperti bi-



SAMY VELLU
... selesai segera

asa," katanya.

Beliau berkata demikian kepada pemberita sempena lawatannya ke Ibu Pejabat TNB di sini hari ini. Hadir sama ialah Dr Ani Arope dan pegawai kanan syarikat itu.

Berikutan itu, beliau mengarahkan TNB supaya mendapatkan khidmat pakar untuk melaksanakan kerja baik pulih jentera dan mesin berkebalan elektrik dipulihkan dalam tempoh

yang singkat.

Antara janakuasa elektrik yang dihentikan perkhidmatannya kerana terbabat dengan kerja baik pulih ialah stesen janakuasa di Tasik Gelugor, Pulau Pinang, Prai, Pasir Gudang Johor, Port Dickson, Paka Terengganu dan Cameron Highlands, Pahang.

Samy memberi jaminan gangguan bekalan elektrik akan dapat diselesaikan apabila kerja baik pulih jentera yang boleh membekalkan lebih 1,000 megawatt beroperasi sepenuhnya Jun ini.

"Setakat ini, TNB mampu membekalkan bekalan elektrik 5,600 megawatt dan daripada jumlah itu 4,600 megawatt saja digunakan untuk keperluan negara.

"Bagaimanapun, TNB tidak boleh mengeluarkan bekalan elektrik tambahan kerana sebahagian janakuasa terpaksa diberhentikan perkhidmatannya berikutan kerja baik pulih," katanya.

Samy juga berkata, kementeriaannya akan berunding dengan Kerajaan Singapura dan Thailand untuk mendapatkan kerjasama bagi mendapatkan bekalan elektrik tambahan.

FMM boleh buat tuntutan

KUALA LUMPUR, Selasa — Persekutuan Pekilang-Pekilang Malaysia (FMM) yang tidak berpuas hati kerana gangguan bekalan elektrik menjejaskan produktiviti sesetengah kilang boleh membuat tuntutan ganti rugi di mahkamah.

Menteri Tenaga, Telekom dan Pos, Datuk Seri S Samy Vellu, berkata persekutuan itu tidak seharusnya membuat tuntutan kepada Kementerian atau Tenaga Nasional Berhad (TNB).

"Kementerian tidak dapat melayan sebarang tuntutan atau tindakan berpunca daripada gangguan bekalan elektrik yang dikatakan menjejaskan pengeluaran dan mengingatkan FMM boleh membuat tuntutan itu di mahkamah," katanya.

Beliau berkata demikian kepada pemberita ketika diminta mengulas mengenai masalah gangguan elektrik khususnya di beberapa kawasan perkilangan di negara ini.

Sebelum ini, Menteri Perdagangan Antarabangsa dan Industri, Datuk Seri Rafidah Aziz meminta Kabinet mengarahkan TNB menyediakan laporan lengkap mengenai gangguan itu kerana menjejaskan produktiviti sektor perkilangan.

Selain itu, Samy akan mengadakan perbincangan dengan Menteri Kewangan, Datuk Seri Anwar Ibrahim untuk membolehkan kementerian itu mengeluarkan peruntukan bernilai RM60 juta yang sudah diluluskan bagi membiayai projek membekalkan elektrik di Sabah.

BH
20 JAN 1998

18 FEB 1993

The Malay Mail, Thursday, February 18, 1993

POWER CONSUMPTION AND THE RICE COOKER



Mohd Zamzam: Reverse trend of increasing power demand

By ANN TEOH

TIRED of the constant power cuts? You can help stop this nuisance with just one simple act.

Stop using your electric rice cooker to cook lunch. Use gas instead.

Believe it or not, if everybody stops using the electric rice cooker to cook lunch, electricity demand is down by 1,800 megawatts. (The daily demand nationwide is 4,600 megawatts.)

But not everybody cooks lunch at the same time. Hence, the electricity demand from electric rice

cookers is not that high at any one time.

But one fact remains: There is not enough electricity during the peak hours from 10am to 5pm, at least until next year when Tenaga Nasional will generate another 1,000 megawatts.

Tenaga Nasional energy technoeconomy manager Dr Mohd Zamzam Jaafar, who leads a programme — Demand-side Management —

looking into ways of making energy conservation affordable, said everyone has a role in reversing the trend of ever-increasing demand.

He said with three million consumers nationwide, even something small like a rice-cooker makes a lot of difference.

Of the three million consumers, about 2.9 million are households although the commercial sector and industries use up about half the electricity generated.

He said Tenaga Nasional is trying to trim the 12 per

cent per year growth in demand to 10 per cent.

"Tenaga Nasional is the only company telling its consumers not to buy so much of its product!" he said.

Klang Valley consumers use 40 per cent of the total electricity supply.

Mohd Zamzam said in looking for alternatives, the Demand-side Management is also looking at fluorescent lamp ballasts.

There are millions of fluorescent lamps in this country.

At a modest estimate of five lamps per consumer, there would be 15 million fluorescent lamps in the country.

"The common ballast is more than 10 watts, the extra-low-loss ballast is 6.5 to seven watts while the electronic ballast is less than three watts," he said.

"Which should we recommend when the common ones cost RM7, the extra extra-low-loss ballast between RM12 and RM14, and the electronic ones RM70?"

"We feel that we should

recommend the extra-low-loss ballast because it is affordable and we still save three watts per lamp, which makes 45 megawatts nationwide."

He said Tenaga Nasional is looking into the possibility of buying the ballasts in bulk, and selling them at Tenaga Nasional counters at below RM10.

He said Tenaga Nasional is also studying the efficiency of compact lamps.

He said other areas which the Demand-Side Management is looking into are escalators and lifts.

"Shopping complexes managers can do their part by not switching on the escalators between 9am and 5pm, when there are not so many customers," he said.

He said other electrical appliances like irons also use up a lot of electricity and consumers can do their part by not using them during the day.

FMM to submit its proposals on how to tackle power crisis

THE Federation of Malaysian Manufacturers (FMM) will submit by next week its proposals to help tackle the current power crisis to the special committee on power utilisation set up by the Energy, Telecommunications and Posts Ministry.

Executive director Tan Keok Yin said FMM had embarked on a survey to gather feedback on the power crisis and expected members to reply by Thursday.

"We expect to get the feedback from our members on Thursday and submit our recommendations by next week," he said after launching the 1993 FMM Directory in Kuala Lumpur yesterday.

He said the FMM would analyse the data and figures before coming up with proposals according to the areas and industries involved, adding that it hoped the crisis could be resolved earlier than the timeframe announced.

Tenaga Nasional Bhd had said that the power crisis now faced by the nation was expected to continue for at least another year.

Tan said Tenaga needed to restore confidence which had been diminishing in the industry and which, to a certain

extent, had affected investment decisions and those about to go into commercial production.

On the economy, Tan said Malaysia could continue achieving the 8 per cent to 9 per cent growth it had enjoyed for the past few years, but this depended on how the country coped with the bottlenecks and moved its economy in the right direction.

"Gross sales and production of industries have gone down. So is the upper end of the construction sector, pointing to a decelerating economy. While we must not be unduly concerned, we must be cognizant of the slowdown," he said, adding that Malaysia needed to beef up its services and infrastructure if it was to compete with the new markets which were also competing for foreign funds.

On the 1993 FMM Directory, FMM



The FMM Directory '93.

publications committee chairman Tan Kean Hoe said the theme for this year's directory was *Total Quality Management and Research and Technology*, to reflect the importance of quality and innovation to help entrench Malaysian exports and new markets.

"As the authoritative guide for facilitating business with Malaysian manufacturers, the directory continues to provide not only a listing of more than 1,200 establishments in manufacturing and related services sectors, but also updated information on the economy, investments and trade incentives," he said.

To complement the theme for this year, he said FMM would hold a quality and technical fair in the middle of this month.

"We are now working with Sirim and an exhibition company on this. The fair will focus on the latest processes and technology which can help to improve quality," he said, adding that FMM's international fair in October would also focus on finished products that had met the various standard requirements.

Private firms can't sell excess power

By FADZIL GHAZALI

COMPANIES with private power generators are not allowed to sell their excess power capacity directly to the public. They can only do so through Tenaga Nasional.

Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu said this is because the private companies are not licensed to set up the necessary infrastructure to transmit electricity to the public.

"Electricity is not something that can easily be put in a bag and sold at a certain price.

"It requires power-lines and specialised infrastructure to ensure safe distribution," he told reporters after attending the weekly Cabinet meeting in Kuala Lumpur yesterday.

Furthermore, if the task of distributing power to the public is extended to the private companies, this will not be in line with the national power grid concept, he said, adding that the companies can utilise their generators for power to run their operations.

Commenting on the present power situation, Samy Vellu said the Cabinet recognised the difficulty faced by the ministry. "Today's power crisis is due to the large scale of power demand, which exceeded Tenaga's projection," he added.

Samy Vellu said the ministry has asked Tenaga to expedite the repair works



□ SAMY VELLU ... 'Cabinet recognised the difficulty'

being carried out on nine of its turbines and to complete several of its new projects as soon as possible.

At present, Tenaga is negotiating with a US company for the installation and supply of three 125-megawatt (MW) turbines in three months, he said.

On the energy task force comprising officials from Tenaga, the Federation of

Malaysian Manufacturers and the ministry set up recently to tackle the power crisis situation, Samy Vellu said it will hold its first meeting next week.

The meeting is expected to discuss the proposed re-scheduling of factory operating hours to the off-peak period and the rebates Tenaga plans to offer the affected companies.

RM200m station for Besut

A PRIVATE power station capable of generating 400 to 600 megawatts of electricity will be built in north Besut at the end of the year, Terengganu Menteri Besar Tan Sri Wan Mokhtar Ahmad said yesterday.

The country's first power joint venture project between a local company and a US firm, it will cost more than RM200 million.

Consultants from both firms are working out the details for discussion with state officials, Mokhtar told reporters after chairing a State Executive Council weekly meeting in Kuala Terengganu.

The Terengganu Govern-

ment is keen to invest in the joint venture to ensure the power station's early completion to meet the increasing power needs of the state's industrial zones, he said.

The project will also ease the burden borne by the Sultan Ismail Power Station in Paka which is currently supplying the Klang Valley and the southern part of the peninsula.

The location of the station, in north Besut, will also facilitate the channelling of electricity to Perak, Kedah, Penang and Perlis, Wan Mokhtar said.

Several experts said the move is timely in view of the

electricity crisis in the country. They said the use of American technology for the Besut station is practical as it can use gas, diesel or coal to generate power.

The experts also feel that other states can well follow the lead taken by Terengganu and set up alternative power generation units and not be over dependent on existing sources.

They lauded the involvement of local and foreign firms in introducing a method of power generation using raw materials and the latest technology, which can supplement existing technology to produce adequate power in the long run. — Bernama



Hotel lima bintang guna kipas angin

GUNAKAN elektrik dengan bijak ...berdasarkan kepada hakikat inilah sebuah hotel bertaraf lima bintang di Pulau Pinang 'mendinginkan' pelanggan-pelanggannya dengan menggunakan kipas angin sahaja.

Negeri itu mengalami keputusan bekalan elektrik hari kedua, apabila Tenaga Nasional Berhad (TNB) merancang untuk mengurangkan tenaga elektrik dari satu tempat ke satu tempat yang lain. — Gambar Bernama.

Pengilang diseru jimat guna tenaga

MELAKA 18 Feb. — Pengerusi Jawatankuasa Pembangunan Perindustrian, Dato' Mohd. Ali Rustam menyeru, orang ramai, pejabat-pejabat kerajaan dan para pengilang supaya menjimatkan penggunaan tenaga elektrik dengan menggunakannya secara bijak.

Sebagai langkah membuktikan betapa seriusnya sokongan itu dikehendaki, beliau sendiri mengarahkan kakitangan kerajaan dan swasta yang ditempatkan di Graha Maju supaya mengambil langkah yang perlu bagi menjimatkan penggunaan tenaga elektrik.

19 FEB
um

Power: Firm action needed, says Dr M

By K.P. Waran

KUALA LUMPUR, Thurs. — Firm action is needed to deal with the country's energy crisis which has reached a critical situation, Prime Minister Datuk Seri Dr Mahathir Mohamad said today.

He said steps needed to be taken to ensure there was sufficient electricity supply throughout the country.

Responding to reporters' questions upon his arrival at the Kuala Lumpur international airport in Subang from Bangladesh and Pakistan, he said there was a need to determine the causes of the frequent breakdowns and take action to overcome them.

He said when the Cabinet had asked and received details of breakdowns throughout the country, it was shocked by the high number of power breakdowns.

Dr Mahathir expressed confidence that Malaysia was capable of tackling the problem and added that the energy crisis would not affect investments.

He said Tenaga Nasional Berhad's application to acquire new turbines had been approved but the installation would take some time.

The Cabinet yesterday directed that no efforts be spared to overcome the problem of power shortage and asked Tenaga Nasional Berhad to expedite repairs and maintenance of power generating plants.

On the cancellation of the exercise to redelineate the electoral constituencies, Dr Mahathir said it would not be an obstacle to holding elections in the country.

He said he did not foresee any problems as the Election Commission had an existing electoral list which could be used in the event of a general election or by-election.

He said the Opposition would not win the general election no matter which electoral list was used.

"There is no problem. (Opposition Leader) Lim Kit Siang will not win even if we use the existing list. He will

□ PLEASE TURN TO
PAGE 4, COL 2



Minta percepat bina loji

1993 **UR SETAR** 18 Feb. — Kerajaan negeri meminta Kerajaan Pusat mempercepat cadangan untuk membina loji tenaga persemburan di daerah Yan untuk mengatasi masalah krisis tenaga yang dihadapi sekarang, kata Menteri Besar, Tan Sri Osman Aroff hari ini.

Beliau tidak menafikan suatu masa nanti masalah itu akan berlaku apabila sektor industri berkembang pesat.

Bercakap kepada pemberita selepas mengadakan perjumpaan dengan pemimpin KEMAS di sini hari ini, Osman menjelaskan, setakat ini kerajaan belum menerima rungutan kekurangan daripada pengusaha kilang.

China sedia bekal alat jana kuasa

PULAU PINANG 18 Feb. — China bersedia membekalkan peralatan menjana kuasa elektrik untuk membantu kekurangan tenaga elektrik di negara ini, kata ketua rombongan ekonomi dan perdagangannya, Encik Zheng Hongye di sini hari ini.

Katanya, peralatan-peralatan itu menggunakan bahan-bahan mentah yang turut boleh dibekalkan seperti minyak dan gas asli di samping membekalkan peralatan menjana kuasa elektrik menggunakan tenaga air.

Bercakap kepada pemberita selepas kunjungan hormat ke atas Ketua Menteri, Dr. Koh Tsu Khoo di KOMTAR, petang ini, beliau berkata, pihaknya kini sedang bertukar-tukar pandangan dengan Kerajaan Malaysia dan kerajaan negeri ini mengenai hal itu.

Apabila diberitahu bahawa sebuah syarikat Amerika Syarikat juga berminat berbuat demikian, Zheng Hongye berkata, sememangnya tentu ada persaingan tetapi pembeli biasanya hendakkan yang murah dan bermutu.

"Kami akan berusaha kuat untuk memenuhi tuntutan pelanggan," katanya sambil menambah,

perkara membekalkan peralatan jana kuasa elektrik itu sedang diteliti dengan rapi oleh negara China.

Rombongan itu adalah dalam rangka lawatan lima hari ke Malaysia dan telah ke Kuala Lumpur bertemu dengan Timbalan Perdana Menteri, Ghafar Baba, Menteri Kewangan Anwar Ibrahim dan Timbalan Menteri Perdagangan Antarabangsa dan Perindustrian, Chua Jui Meng dan badan-badan perdagangan.

Zheng berkata, sehingga ini belum ada sebarang perjanjian dibuat mengenai perkara khusus atau pun projek tetapi berharap lawatan itu akan menggalakkan kegiatan ekonomi kedua-dua negara.

Menurutnya, selama di sini mereka juga akan bertemu dengan Persatuan Dewan Perindustrian China (ACCIM), Persekutuan Pengilang Malaysia (FMM) dan Dewan Perniagaan Pengimport dan Pengeksport China.

Jumlah dagangan antara China dan Malaysia sekarang ini ialah AS\$1.3 bilion.

Rombongan itu akan berlepas ke Bangkok, esok. Sebelum ke Malaysia, mereka telah melawat Indonesia.

Jimatkan 5 megawatt tenaga elektrik

SEREMBAN 18 Feb. — Negeri Sembilan berusaha untuk menjimatkan lima megawatt tenaga elektrik selaras dengan rayuan Tenaga Nasional Berhad (TNB), kata Menteri Besar, Tan Sri Mohd. Isa Abdul Samad.

Sehubungan dengan itu, kata beliau, beberapa catuan tenaga telah dilaksanakan di kawasan tertentu sejak tiga hari lalu.

Menurut beliau, catuan dibuat antara pukul 10 pagi hingga 5 petang dan antara kawasan yang telah dicatu ialah Taman Tuanku Jaafar, Jalan Senawang, Pancor, Paroi dan sekitar Rasah.

"Catuan ini akan dibuat di seluruh negeri secara berperingkat-peringkat," katanya kepada pemberita selepas upacara pecah tanah sebuah kilang di sini hari ini.

Menteri Besar memberitahu, setakat ini catuan tidak dilaksanakan di sektor perkilangan kerana TNB masih membuat kajian mengenainya.

Serentak dengan catuan itu, Isa menasihatkan orang ramai supaya memberi kerjasama dan bersabar menghadapi kesulitan yang timbul.

Krisis satu pengajaran — Dr. Koh

PULAU PINANG 18 Feb. — Ketua Menteri, Dr. Koh Tsu Khoo hari ini menyifatkan krisis kekurangan tenaga yang sedang dialami negara sebagai rahmat kerana ia menjadi pengajaran kepada semua pengguna elektrik supaya mengubah sikap gemar membazir.

Krisis kekurangan tenaga itu harus memberi kesedaran supaya tidak bersikap sambil lewa dalam menggunakan kemudahan elektrik, katanya kepada pemberita selepas meletakkan batu asas Kompleks Penukaran Emas dan Barang Kemas Pulau Pinang.

Cabinet directs Tenaga to expedite repairs

By Vijayan Menon
and Kamarulzaman
Yunus

KUALA LUMPUR, Wed. — The Cabinet today directed Tenaga Nasional Bhd to expedite repairs and maintenance of power-generating plants to overcome the current shortage.

Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu said he explained to the Cabinet during today's weekly meeting, chaired by Deputy Prime Minister Ghafar Baba, the measures Tenaga Nasional was taking to resolve the problem.

"The Cabinet understood the difficulties we are facing but has directed that no efforts be spared to find a speedy solution," he said at his office this afternoon.

Samy Vellu said although the installed power-generating capacity was 5,600 megawatts, the actual production was 4,475MW. "Since the demand today is 4,570MW, there is a shortfall of 95MW."

The deficit, he said, was due to a sudden surge in industrial growth, a reflection of the influx of investments and rapid economic growth.

"The industrial demand has gone up tremendously. Our projection before was some eight per cent annual growth in power consumption but due to the rapid industrialisation, the increase is between 13 and 15 per cent."

Samy Vellu said efforts were being made to repair a 110MW turbine which had broken down at the Paka power station in Tereng-

ganu. He added that the power turbines in Port Klang (300MW), Port Dickson (120MW), Paka (100MW) and Pasir Gudang (87MW) were under service.

"Power generating turbines have to be serviced every 4,000 hours of running. But some of our machines have been operating for over 5,000 hours," he said.

"We have to ask permission from the Machinery Department for this. If this is not done, there will be a severe shortage."

Two hydro-electric power generators at Sungai Piah in Sungai Siput, capable of generating an additional 15MW, came onstream yesterday.

"We have issued a letter of acceptance for two 30MW power generating turbines each. Another eight will be

issued soon for which prices are being negotiated with the suppliers," Samy Vellu said.

He said negotiations were also under way with another supplier on the purchase of three fast-track insulation turbines of 125MW each.

Pending the increase in power generation, major consumers would be requested to shift their operations to off-peak periods.

"We have placed them under three categories — three, two and single-shift manufacturers. We will not ask the three-shift operators to alter their timings."

"But the other two categories of manufacturers will have to change their schedules."

"Members of the Federation of Malaysian Manufacturers (FMM) will be meet-

ing us on Feb 24 to decide on the rescheduling of shifts."

On whether the shift rescheduling would be made mandatory, he said if the affected manufacturers did not co-operate, "then we may have to officially introduce power cuts till sufficient electricity is available".

On the RM217 million compensation asked by the FMM for losses suffered by manufacturers due to the major blackout last September, Samy Vellu said Tenaga Nasional would not be able to consider it.

"Payment of compensation is a debatable subject. The sum is enormous and will affect Tenaga Nasional badly. Moreover, if compensation is paid then it will be setting a precedent."

"Anybody who suffers a power cut for a couple of

hours will be coming forward to seek compensation."

In Klang, Menteri Besar Tan Sri Muhammad Muhammad Taib said today the Selangor Government would offer suitable land at a low premium to Government agencies and the private sector to build power stations.

He said the Government would do its best to resolve the inadequate power supply in the country.

Selangor is one of the States where the situation is quite severe and needs immediate attention.

Muhammad said those keen on having their own power supply would be given priority in allocating a suitable site on low premium rate.

He said as the largest consumer of power supply, it

18 FEB 1993

was necessary for the State to assist the affected parties to set up their own power plants so that the burden on the authorities could be reduced.

In Penang, United States Ambassador to Malaysia John Sternwolf today offered to help Malaysia overcome the crisis.

Sternwolf said this could be done by either getting US investors here to reduce their energy consumption or assisting Tenaga to increase its power output.

He held a meeting last night with representatives of US companies in Penang.

Sternwolf said most of them had agreed to comply with Tenaga's instructions to reduce their operating hours.

□ MORE REPORTS
IN PAGE 2

TNB diarah cepat baiki janakuasa

18 FEB 1993

BERITA HARIAN

KUALA LUMPUR, Rabu — Kabinet hari ini mengarahkan Tenaga Nasional Berhad (TNB) mempercepat kerja membaik pulih dan penyelenggaraan stesen janakuasanya untuk mengatasi krisis tenaga sekarang.

Menteri Tenaga, Telekom dan Pos, Datuk Seri S Samy Vellu, berkata beliau menjelaskan perkembangan terbaru krisis tenaga sekarang serta pendekatan yang diambil oleh TNB untuk mengatasinya, dalam mesyuarat Kabinet hari ini, yang dipengerusikan Timbalan Perdana Menteri, Ghafar Baba.

Kabinet memahami masalah yang dihadapi tetapi mengarahkan semua usaha diambil untuk mencari penyelesaian segera kepada masalah itu.

Samy Vellu berkata, walaupun keupayaan

maksimum penjanakuasaan TNB adalah 5,600 megawatt tetapi jumlah yang dikeluarkan sekarang hanya 4,475 megawatt.

"Oleh kerana permintaan sekarang sudah mencapai 4,570 megawatt, TNB mengalami kekurangan 94 megawatt.

Peningkatan pertambahan itu disebabkan perkembangan pesat sektor industri, yang mencerminkan pertumbuhan pelaburan," katanya ketika ditemui di pejabatnya, hari ini.

Menurutnya, TNB menganggarkan peningkatan lapan peratus penggunaan tenaga setiap tahun tetapi perkembangan pesat perindustrian menyebabkan ia meningkat ke tahap 13 hingga 15 peratus setiap tahun.

Usaha dijalankan membaik pulih sebuah turbin

yang berupaya mengeluarkan 110 megawatt yang mengalami kerosakan di Stesen Janakuasa Paka, Terengganu.

"Turbin di stesen janakuasa di Port Klang (300MW), Port Dickson (120MW), Paka (100MW) dan Pasir Gudang (87MW) juga sedang mengalami kerja penyelenggaraan.

"Turbin janakuasa perlu menjalani kerja penyelenggaraan setiap 4,000 jam penggunaan, tetapi sebahagian daripadanya sudah digunakan lebih 5,000 jam," katanya.

Masalah kekurangan tenaga itu mungkin dapat diatasi sepenuhnya dalam tempoh antara enam dan lapan bulan.

Dua generator di Sungai Piah, Sungai Siput mula digunakan sejak semalam dan mampu menghasilkan 15 MW kuasa elektrik.

'Savings drive not aggressive enough'

New Straits Times 7 FEB 1993

By WAN NONG REZAL

CURRENT efforts to increase domestic savings are not aggressive enough to mop up the excess liquidity in the country, Finance Minister Datuk Seri Anwar Ibrahim said yesterday.

He urged Permodalan Nasional Bhd (PNB), other private agencies and investment funds to embark on aggressive and effective campaigns to solicit funds for productive purposes.

"We should be looking into other possibilities ... I think we are not aggressive enough in trying to alert the public to the necessity of supporting government measures to encourage savings," he told reporters after opening the National Symposium on the Securities Industry Towards 2020 in Kuala Lumpur.

The country is reported to be flush with excess liquidity of between RM9 billion and RM10 billion.

"We have asked the various funds, including PNB, to look at ways to increase savings," he said, adding that the stockbroking industry also has a major role to play in encouraging Malaysians to make productive investments.

Malaysia's savings rate has fallen from 33.6 per cent of the Gross National Product in 1987 to about 31 per cent last year, lower than the targeted 36 per cent by the end of the Sixth Malaysia Plan.

Furthermore, the country's inflation rate as been creeping upwards, hitting 5.1 per cent in the third quarter of 1992, while the overall 1992 inflation rate

was 4.7 per cent.

"The country's inflation rate for 1993 has to be lowered and the Government is determined to keep it at about 4 per cent," he said.

Anwar added that the Government has also identified the specific areas which are the main causes of inflation, and the industries affecting the price index.

According to him, the sectors which the Government will be looking into are farming (vegetables and fruits) and fisheries. "These industries will be supported to further improve their productivity and thus help to ease inflation," he said.

At the same time, growth in these sectors will also improve the well-being of the poor and ensure that the long-term goal of price stability remains intact.

On plans to generate further economic growth, Anwar said the Government will look at several subsectors, to see if they require some form of assistance (while keeping to the Sixth Malaysia Plan expenditure ceiling of RM55 billion).

However, this will only be done if the Government finds that these subsectors require the necessary push.

"The assistance will largely be channelled into certain low-cost and medium-cost industries, which include such areas as infrastructure development, low-cost housing and domestic tourism," he said, adding that it is unlikely for the assistance to be channelled into new areas.

Commenting on the possibility that the push will further generate inflation, An-



war explained that any assistance the Government were to provide would be minimal, and limited to how of much assistance to given.

"It there were to be any adjustment to the ceiling, it would be very minimal," he added.

Anwar stressed that the stimulus will not be through an expansionary budget, because a prudent and a properly managed economy will mean that the Government will have to stick to some basis of expansion in the economy.

In his keynote address, Anwar reminded the fast

growing local securities market of the danger of complacency.

Although the Kuala Lumpur Stock Exchange (KLSE) is now the biggest market in Asean in terms of market capitalisation, and has a creditable place after Japan, Taiwan, Hong Kong, South Korea and Australia, it still has a lot of room for growth.

"There are only about 1.5 million Malaysian individuals registered as shareholders, constituting about 81.1 per cent of total shareholders, but holding only 12.4 per cent, or RM4.9 billion, of equity. The scope for in-

creased involvement and participation is stupendous," said Anwar.

He also said if scripless trading had been introduced on the KLSE as originally scheduled, trading volumes would have been even higher than that achieved last year, which was in many ways a landmark year.

The coming into force of the Securities Commission Act 1992 on March 1 will ensure the orderly development of a sophisticated securities industry with unquestioned market integrity.

"In the world of finance, whatever the market or instrument, nothing is as pernicious as loss of confidence.

"The Securities Commission will be well advised to come down hard on any transgression even as it sets about managing, diversifying and modernising the securities industry," said Anwar.

The level of professionalism among member companies of the KLSE has to be improved further. To this extent, the policy of corporatisation has not quite achieved its objective of high quality research and execution.

There had also been hiccups in the past, some more serious than others, that do not bear repeating, he added.

On the make-up of the Securities Commission, Anwar said apart from Dr Munir Majid, who has been appointed executive chairman, the other members will be made known in the next few days.

□ MORE REPORTS: p5,6

□ EDIT: p4

Incentives to promote energy conservation

NEW SPARKS TIMES

10 FEB 1993

By Pang Hin Yue and

Mehran Chinniah

KUALA LUMPUR, Wed. — The Government is looking into the possibility of establishing a scheme of incentives to encourage energy conservation.

The incentives include credit facilities, tax exemptions and subsidies for the importation and usage of energy-saving devices.

Another consideration is providing assistance to users for retrofitting or switching over to energy efficient appliances.

The Energy, Telecommunications and Posts Ministry in a report "Energy Conservation in Malaysia" said the Government might also introduce laws and regulations to ensure compliance.

Among them, it said, was to limit the importation of obsolete and inefficient machinery and to enforce energy labelling for appliances.

A training and technology transfer programme with developed countries through international aid agencies on areas of energy

Projections of Final Energy Demand in Kilo Tonne Oil Equivalent

Year	1990	2000	2020
Moderate - Business as usual	12,465	25,637	74,756
Moderate - Energy Efficient	12,465	23,143	59,865

conservation might also be sought, it added.

According to the report, 90.4 per cent of Malaysian homes will receive electricity supply by 2000, and 96.8 per cent by 2020.

The projected increase in electrification level in the country, it said, was influenced by the rise in population, per capita income and urbanisation rate.

It said there would be a significant increase in energy demand by the year 2020.

Without any energy conservation efforts, the country's energy demand will surge from 12,465 kilo tonne oil equivalent (KTOE) in 1990 to 25,637 KTOE in 2000 and 74,756 KTOE in 2020.

However, if efforts were made to use energy efficiently, the demand can be reduced to 23,143 KTOE in 2000 and 59,865 KTOE in 2020.

"From the two projections, it is clear that energy efficiency has a prominent

role to play in meeting the rising energy needs of the nation," it said.

The report also noted that the industrial sector had a potential for energy saving, which was estimated at between 15 and 20 per cent.

Investments would be required to fully realise such potential, it said, adding that 75 per cent of them would have a pay back period of less than three years.

Commercial and government buildings have also

been identified as energy saving sectors.

The electricity bill of the government buildings has been estimated at RM10 million a year.

"With the saving of 10 to 15 per cent of the energy by adopting no-cost or low-cost measures, the Government can save between RM1 million and RM1.5 million per year."

Towards helping the industrial sector in utilising energy efficiently, the ministry has launched a project on energy auditing.

It provides information and advice to industries on energy conservation technologies.

The information obtained through the audit is also used to study the energy consumption pattern and to forecast energy demand.

The ministry, on its part, has carried out energy audit on four selected government buildings. It is also in the process of carrying out retrofitting for light fixtures in the ministry's premises here at a cost of RM50,000.

It is expected to be a prototype for government offices.



MOKHTAR ... increasing power needs

Private station for Besut

KUALA TERENGGANU, Wed. — A private power station capable of generating 400 to 600 megawatts of electricity will be built in north Besut at the end of the year.

Menteri Besar Tan Sri Wan Mokhtar Ahmad said today that the power station would cost more than RM200 million.

It is the country's first joint-venture power project between a local company and an American firm.

Consultants from both firms were working out the details for discussion with State officials, Wan Mokhtar told reporters after chairing a State Executive Council weekly meeting.

The Terengganu Government was keen in participating in the joint venture to ensure the power station's early completion, he said.

Wan Mokhtar said the project would also help ease the nation's power shortage.

Part of the power generated by the station would be sold to Tenaga Nasional Berhad, he said.

The project would also ease the burden borne by the Sultan Ismail power station in Paka which was currently supplying the Klang Valley and southern region, he added. — Bernama

Going nuclear after year 2020 a possibility

KUALA LUMPUR, Wed. — Malaysia has not ruled out the option to use nuclear energy after year 2020, Deputy Energy, Telecommunications and Posts Minister Datuk Mohamed Tajol Rosli Mohamed Ghazali said today.

He said although presently the national energy resources comprised oil, natural gas, coal and hydropower, the need to use nuclear energy might arise later.

In view of this, he said, a feasibility study on nuclear energy would be conducted.

He was responding to a

statement by Deputy Prime Minister Ghafar Baba on Saturday that the Government was studying all possibilities, including the nuclear option, to overcome energy shortage and the frequent power disruptions in the country.

While Malaysia had plans to tap hydropower in a big way, Tajol said there might be opposition from international bodies.

He said, for instance, Sungai Rejang in Sarawak had the potential to generate 20,000 megawatts of hydropower.

But to do so, he said,

would entail developing a few dams which might raise environmental concerns as the rainforests and rivers would invariably be affected.

Pressure from international organisations might prevent such projects from materialising, he added.

"Thus, to ensure we have choices, we should not rule out the possibility of harnessing nuclear energy, particularly after year 2020 when our nation has achieved the status of a fully industrialised nation," he told the Press after opening the Japan-Malaysia con-

ference on "Energy conservation and environment" at the KL Hilton here.

Also present were Mr Tohji Sato of the New Energy and Industrial Technology Development Organisation and Mr Hiroshi Ishida, vice-president of the Energy Conservation Centre of Japan.

Earlier in his speech, Tajol said the inaugural joint conference between Malaysia and Japan in 1991 had resulted in a RM1.25 million photovoltaic demonstrative project to be implemented later this year in Papar, Sabah.

Petronas to use natural gas for air-con

NEW STRAITS TIMES

18 FEB 1993

From Ahirudin Attan

PARIS, Wed. — Gas consumption, still relatively new in Malaysia, takes on a new dimension as Petronas considers the use of natural gas for air-conditioning. A pilot project will be implemented at its headquarters building which is expected to be completed in 1996.

Petronas vice-president (gas and petrochemical business sector) Mohd Ali Yasin, in a paper that won him the Anzai award for the most outstanding presentation at the on-going 15th Gastech conference here, said the plan to use gas-powered air-conditioning was one of the new major projects involving natural gas in Malaysia.

"We envisage there will be a lot of potential for gas air-conditioning in the country, especially in new

shopping complexes, hotels, et cetera," he told about 1,500 participants at the opening session of the four-day seminar and exhibition yesterday.

The plan to use gas for air-conditioning is based on cost-efficiency and environmental-friendly arguments and follows up on the country's on-going effort in promoting natural gas for use in vehicles (NGV) to address the increasing pollution problem.

Ali said there were now six service stations in the Klang Valley using the mother/daughter concept. Some 600 cars had converted and by the end of this year, 1,100 more petrol vehicles were expected to turn to NGV.

"After gaining experience from the conversion of petrol-driven vehicle to NGV, the next step is to embark

on displacing diesel with NGV," he said, adding that a pilot project had started this year where several NGV-fuel buses would be tested in the Klang Valley.

Malaysia is being represented by 19 senior executives from the industry, mainly from Petronas and its subsidiaries and the Malaysian International Shipping Corporation. MISC director (petroleum and gas) Captain Ghani Ishak and MLNG managing director and chief executive officer Muri Muhammad are also scheduled to deliver working papers to the conference later this week.

Ali said the Malaysian gas industry had progressed significantly since it was first used in Miri, Sarawak, in the 1940s and expected "a rush of new activities" during the remaining years of the 1990s, including the use

of natural gas for air-conditioning.

Future projects, he told the conference, included the implementation of the Peninsular Gas Utilisation Project (PGU III). On the west coast of the peninsular, the gas transmission pipeline would be extended northwards up to the border with Thailand by 1997 transversing more than 500km while on the east coast, the pipeline would be extended northwards and then westwards to complete the "loop".

"There are plans to extend the gas transmission to Thailand as Malaysia is negotiating with Thailand for the sale of gas," he said.

As the baseload user of natural gas are the power stations, more gas processing plants would be installed to meet the gas demand by the power stations.

With the implementation of the gas processing plants, more ethane, propane and butane will be extracted and made available for use as petrochemical feedstock as well as for fuel," he added.

Ali said Petronas was also planning to expand the ethylene plan for increased polyethylene production and for other ethylene-based projects, as well as to increase the production of propylene and isobutylene. The isobutylene will be used to increase MTBE production through a second plant while the propylene will be sold to interested parties who plan to set up propylene-based petrochemical projects in Malaysia.

Petronas is also exploring the possibility of partial extraction of propane and butane from natural gas in East Malaysia.

Tenaga to give 3-day notice on power cuts

By PAMELA YEH

KUALA LUMPUR: Tenaga Nasional is giving consumers three days' notice on impending power cuts.

A Tenaga spokesman said yesterday the cuts, due to load-shedding, were being announced through advertisements in major newspapers and over radio.

"The advertisements carry details of the time of the cuts, areas affected and numbers of operations rooms which members of the public can ring for more information and advice," she said.

Consumers were advised to look out for these advertisements.

Enquiries can also be directed to the Tenaga hotline at ☎ 03-282-7551 and ☎ 03-282-7548.

She said it was likely the cuts would go on for some time as there was a shortage of power.

She encouraged commercial and private users to conserve energy so that load-shedding exercises could be reduced from once in two weeks to once in three weeks.

"Offices can help by switching off or controlling the temperature of their air-conditioning systems, reduce lift and escalator operations and use energy-saving light bulbs," she said.

She also suggested that factories operate their air

compressors efficiently to prevent leakages and stagger their business hours.

She said Tenaga was holding discussions with various industries and manufacturers to reduce their energy consumption and shift operations to off-peak hours.

Meanwhile, a Telekom Malaysia exchange in Jalan Kuchai Lama was unaffected by the power cut yesterday.

"All our telephone exchanges are equipped with back-up generators which come on automatically in the event of a power cut," said Telekom's central region office public relations officer Puan Fauziah Taib.

Hotels in Penang reduce use of power

PENANG: Most big hotels here have started using less power between 10.30am and noon and between 1.30pm and 4pm.

Penang International Hotels Association co-ordinator Des Pugson said yesterday they had cut energy consumption by 10 per cent by reducing air-conditioning and re-scheduling the use of high-powered equipment.

Pugson, who is Rasa Sayang Resort's general manager, said Tenaga Nasional had requested hoteliers last Thursday to cut down consumption by 10 per cent.

"It is important that hotels do their part to help ensure minimum power disruption in future," he said.

Hotel Equatorial public relations manager Nora Hamid said her hotel was cutting down on energy consumption by shutting off power to areas which were under or not utilised.

State offers land with low premiums for power stations

By T. SELVA

SHAH ALAM: The Selangor Government is offering land with low premiums for the construction of power stations to resolve the nation's current energy crisis.

Mentri Besar Tan Sri Muhammad Haji Muhammad Taib said yesterday that the power supply would be privatised.

He said Selangor, which consumed the most energy in the country, was concerned about the regular interruption of power supply.

He said the State Government wanted to see the problem resolved

soon so that the state's rapid industrial growth would not be affected.

He was commenting on Tenaga Nasional executive chairman Tan Sri Ani Arope's statement that Tenaga had received complaints from the Penang Chief Minister and the Mentris Besar of Johor, Perak and Selangor on the power disruptions.

Muhammad said he was studying a report by the Federation of Malaysian Manufacturers (FMM) on the power crisis.

It is understood that the FMM was unhappy with the electricity supply which was affecting the manufacturing and pro-

duction operations.

In Kuantan, Pahang would seek a clarification from Tenaga on its plan to reduce power consumption, Mentri Besar Tan Sri Haji Mohamed Khalil Yaacob said yesterday.

He said Tenaga Nasional should state the extent of the problem as investments to the state would be affected.

"Any potential investor will want to know about the latest situation before even talking of investing," he said.

Khalil said Tenaga Nasional should encourage some big companies to have their own power generating units.

Need for factories to generate power

KUALA LUMPUR: There is a need to find ways to get factories, particularly those using reconditioned machineries, to generate their own supply of power.

Deputy Energy, Telecommunications and Post Minister Datuk Tajol Rosli Ghazali said yesterday

that such machineries were mostly inefficient in energy use.

Using them was also detrimental to the environment, he said.

He said if factories have their own power supply, the country would have enough energy.

Tajol was speaking to

reporters after delivering the keynote address at the two-day Japan-Malaysia Conference on Energy Conservation and Environment yesterday.

"It's true factories may lose a bit, but they should consider the loss as a little contribution to the energy crisis," said Tajol.

PRIVATE POWER PLANT PLANNED

18 FEB 1993

Malay Mail

By STEPHEN THEN

KUALA TERENGGANU: A private company is to build a multi-million ringgit power plant in Besut to supply electricity to the whole country.

The project, with American interests and expertise, is estimated to cost more than RM200 million.

When completed, it may signal the end of Tenaga Nasional Bhd's monopoly on power supply.

Mentri Besar Tan Sri Wan Mokhtar Ahmad, in disclosing this yesterday, said the mega project

would be sited in the Besut district, near the border with Kelantan.

"The details for the set-up are still under discussion but the project will begin once an agreement has been reached," he said after chairing the state executive council meeting.

He, however, did not disclose the names of the parties involved in the negotiations.

It is believed that the Besut plant may be able to produce between 400 MW and 600 MW at full capacity and the turbines may use several types of fuel.

The electricity generated will be connected to the national grid for distribution to the rest of

the country.

Wan Mokhtar said there was an urgent need to end the current power crisis to prevent further disruptions which might jeopardise industrialisation plans of states.

He said a solution might be letting private companies build their own plants.

The Besut plant might also sell power to Tenaga for distribution, he said, adding that American technology would be adopted.

Wan Mokhtar said the Terengganu government might want to invest in the joint venture but, at the moment, no definite decision had been made.

Krisis tenaga: Kabinet arah lakukan apa saja

KUALA LUMPUR 17 Feb. — Kabinet hari ini mengarahkan Kementerian Tenaga, Telekom dan Pos melakukan apa sahaja usaha untuk mengatasi krisis tenaga yang sedang melanda negara.

Antara lain, Kabinet meminta supaya kementerian berkenaan memperbaiki dan menyelenggara janakuasa yang rosak bagi mengatasi krisis tersebut.

Menteri Tenaga, Telekom dan Pos, Dato' Sri S. Samy Vellu berkata, arahan itu dibuat selepas beliau menjelaskan kepada Jemaah Menteri pagi ini mengenai pendekatan-pendekatan yang diambil oleh Tenaga Nasional Berhad (TNB) berhubung krisis tersebut.

"Kabinet memahami kesukaran yang dihadapi oleh TNB tetapi mengarahkan supaya segala langkah segera diambil untuk mengatasi masalah itu," katanya kepada pemberita di pejabatnya di sini hari ini.

Menurut Samy Vellu, TNB juga telah diberikan surat pengesahan bagi penerimaan dua buah turbin yang mampu menghasilkan 300 megawatt (MW) tenaga elektrik.

"Selain itu, proses runtingan untuk mendapatkan lapan lagi turbin yang mempunyai kuasa yang sama sedang berjalan sekarang," katanya.

Beliau menambah, perundingan juga sedang di-

LIHAT MUKA 2

Atasi krisis tenaga

adakan dengan sebuah syarikat dari Amerika Syarikat bagi memasang tiga turbin yang kuasanya 125 MW.

Dengan usaha-usaha tersebut, katanya, adalah dijangka bahawa krisis tenaga dapat diatasi dalam tempoh enam hingga sembilan bulan akan datang.

Mengenai penggunaan semasa elektrik, beliau memberitahu, maksimum kapasiti semua janakuasa yang dikendalikan oleh TNB ialah 4,475 MW berbanding dengan permintaan sebanyak 4,570 MW.

Isnin lalu, Pengerusi TNB, Tan Sri Ani Arope berkata, seluruh negara akan mengalami gangguan bekalan elektrik yang lebih teruk jika para pengguna terutama sektor perindustrian tidak berupaya menjimatkan penggunaan tenaga dalam tempoh tiga bulan akan datang.



Minis
at th

17 FEB 1993

Tenaga must change attitude

KUALA LUMPUR, Tues. — Tenaga Nasional Berhad's management needs to have a change of attitude to ensure its smooth operations in meeting the country's future energy needs, according to Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu.

Tenaga needs to think ahead to meet the nation's needs for the next 25 years and not merely plan to install power plants when the necessity arises, he said.

Samy Vellu emphasised that Tenaga should liaise with other ministries and monitor energy consumption.

Tenaga will take steps to ensure its proposals for expansion were not shelved by other authorities, he said.

He was speaking to reporters after meeting Swedish Transport and Communications Minister, Mr Mats Odell at his office.

Samy Vellu said it is necessary to reduce red tape to ensure there were no delays in implementing Tenaga's energy plans.

He said Tenaga's staff are experienced and hard working but they need to think differently now that the utility is corporatised.

"The ministry and the

utility is checking to see how the management and operations can be modified to put Tenaga in the right perspective for the future," he said.

The working paper on the nationwide power failure last Sept 29, which is originally scheduled to be submitted to the Cabinet tomorrow, will only be submitted during the first week of March, he said.

He said this is because more time is needed to complete the working papers. He said that experts from the United Kingdom took about four months to complete their study.

Samy Vellu said three million new telecommunication lines will be available in five years following a RM2 billion contract awarded to five companies recently, including to a Swedish telecommunications firm.

With the additional lines, there will be six million lines in the country and this will ensure one telephone to every five persons compared with one telephone to every eight persons now.

On his meeting with Odell, Samy Vellu said they discussed bilateral relations and also the performance of Telekom Malaysia Bhd and Pos Malaysia Bhd.

Meanwhile, Tenaga's Kuala Lumpur (South) officers met its 40 largest consumers, which included banks, hotels and shopping complexes, at a dialogue held at the Regent Hotel this afternoon to appeal to them to help save energy.

Senior district manager Jaafar Yusof said Tenaga is appealing to the large consumers to reduce their consumption voluntarily by 10 per cent during peak hours between 10am and 4.30pm.

He said this is vital so that Tenaga will avoid having to carry out load-shedding and load curtailment due to energy shortage.

The large consumers responded positively to the appeal and said they would do their best to conserve energy.

The dialogue was part of the activities under the energy conservation campaign launched by Tenaga executive chairman Tan Sri Dr Ani Arope yesterday.

Meanwhile, in Alor Star, the Kedah/Perlis Tenaga area manager Mohammad Jaafar said his department stands to lose about RM74,000 daily from the current load curtailment exercise.

He said the week-long curtailment which began yes-

terday was necessary to curb possible power shortage in the two States.

"We began the load curtailment yesterday and are monitoring the electricity usage in the districts. So far, there are very few complaints from our users.

"We have notified our customers, especially factories, in advance and advised them to take alternative measures to ensure their daily operations are not severely affected," he said.

Mohammad said the load curtailment, part of Tenaga's nationwide energy conservation campaign, will be carried out for a week to check its effectiveness.

"We will increase the curtailment or duration of the exercise should the need arises. We will wait and see," he said.

In Kangar, the Perlis Government has directed all Government departments and agencies to conserve electricity although the per capita usage in Perlis is lower than national average.

Menteri Besar Dr Abdul Hamid Pawanteh said the directive was sent out to heads of department in view of the present power crisis although there is actually no need for Perlis should reduce its consumption.

Pulau Pinang mula berjimat

17 FEB 1993

PULAU PINANG 16 Feb.— Hampir 700 buah kilang di kawasan perindustrian di negeri ini akan memberhentikan operasi masing-masing sehari bagi setiap sepuluh hari dalam usaha menjayakan langkah penjimatan tenaga elektrik sekarang, kata Ketua Menteri, Dr. Koh Tsu Koon.

Perbadanan Pembangunan Pulau Pinang (PDC) akan mengatur jadual yang akan dipatuhi oleh kilang kilang dari perbicangannya yang diadakannya dengan Persekutuan Pengilang-pengilang Malaysia (FMM) cawangan utara, Frepanca dan wakil kilang kilang yang menjadi penyelaras bersama pengurus TNB negeri.

“Adalah dijangka tidak kurang dari 70 buah kilang akan mengikut giliran untuk memberhentikan operasi mereka setiap



**GUNAKAN
ELEKTRIK
DENGAN
BIJAK**

hari,” ujarnya kepada pemberita.

Formula ini yang dikemukakan kepada Tan Sri Ani Arope melalui telefon semalam telah dipersetujui pada dasarnya oleh Pengerusi Eksekutif Tenaga Nasional Berhad (TNB) itu.

Ia merupakan sebagai cadangan balas kepada arahan TNB yang

mahukan setiap kilang di negeri ini menutup operasi mereka selama tiga jam setiap hari dalam menghadapi krisis tenaga elektrik sekarang.

Arahan TNB itu menimbulkan perasaan kurang senang industri pembuatan di negeri ini walaupun mereka rata-rata bersetuju dengan rancangan mengurangkan penggunaan tenaga elektrik, ujar Dr. Koh.

“Tan Sri Ani memberi sambutan yang baik terhadap cadangan saya itu dan telah menyatakan persetujuan pada dasarnya setelah beliau berunding dengan bahagian pengagihan bekalan tenaga elektrik TNB,” kata Dr. Koh.

Ketua Menteri menarik perhatian adalah sukar bagi kilang-kilang yang ada untuk memberhentikan operasi mereka tiga jam setiap hari terutama

bagi kilang-kilang yang mengambil masa yang panjang mempunyai tempat tempat pemanas.

Langkah memberhentikan operasi kilang secara bergilir-gilir ini pernah dilakukan dalam akhir tahun 70-an dan awal tahun 80-an apabila negeri ini menghadapi masalah yang serupa, jelasnya.

Dr. Koh meminta TNB supaya memaklumkan kepada PDC terlebih dahulu mengenai sebarang arahan yang perlu dipatuhi supaya segala sebarang langkah yang diambil nanti dapat dilakukan dengan teratur tanpa menjejaskan sangat operasi kilang-kilang berkegiatan.

Beliau juga menggesa TNB supaya mempercepatkan usaha membina loji janakuasa elektrik secara persendirian atau secara usahasama.

Hadkan penggunaan elektrik

KANGAR 16 Feb. — Semua ketua jabatan dan agensi kerajaan Perlis hari ini diarah menjimatkan penggunaan elektrik.

Setiausaha Kerajaan Negeri, Dato' Nik Abidin Nik Omar berkata arahan itu dikeluarkan sebagai menyahut seruan Pengerusi Eksekutif Tenaga Nasional Berhad, Tan Sri Ani Arope semalam agar semua pihak menjimatkan penggunaan elektrik.

Nik Abidin berkata terpuhlamlah kepada budi bicara ketua-ketua jabatan dan agensi berusaha mengurangkan penggunaan elektrik di jabatan masing-masing. — Bernama.

Gariskan rancangan masa depan

FMM edar borang untuk dapat maklumbalas

17 FEB 1993

JOHOR BAHRU 16 Feb. — Persekutuan Pekilang-pekilang Malaysia (FMM) telah mengedarkan borang kaji selidik untuk mendapat maklumbalas ahli-ahlinya bagi mengatasi krisis tenaga yang sedang melanda negara sekarang.

Borang kaji selidik itu telah diserahkan kepada pekilang-pekilang seluruh negara sejak 12 Februari lalu dan akan diserahkan kepada FMM pusat pada 20 Februari ini.

Penolong Pengarah FMM Johor, Mahmud

Ismail berkata, terdapat tujuh soalan dalam borang kaji selidik tersebut yang antara lain memerlukan maklumat latar belakang dan jumlah keperluan tenaga kilang berkenaan.

“Pekilang juga dikehendaki menjawab beberapa soalan terhadap syor-syor yang dicadangkan seperti mengubah waktu kerja serta kos yang ditanggung ekoran perubahan tersebut,” katanya kepada *Utusan* di sini hari ini.

Beliau berkata demikian sebagai mengulas

langkah-langkah yang dijalankan oleh FMM untuk membantu Tenaga Nasional Berhad (TNB) mengatasi krisis bekalan tenaga negara.

Menurutnya, hasil kaji selidik itu akan dijadikan sebagai cadangan konkrit apa sebenarnya yang diperlukan oleh pekilang.

Kata Mahmud, FMM pusat akan mengendalikan sepenuhnya proses pengumpulan data itu kerana krisis tenaga bukan lagi menjadi masalah negeri tetapi masalah negara.

KUALA LUMPUR 16 Feb. — Menteri Tenaga, Telekom dan Pos, Dato' Sri S. Samy Vellu mengarahkan Tenaga Nasional Berhad (TNB) menggariskan rancangan jangka panjang bagi tempoh 25 tahun sebagai langkah mengelakkan krisis tenaga daripada berulang.

Beliau berkata, TNB menerusi Kementerian Tenaga, Telekom dan Pos perlu berkerjasama dengan kementerian-kementerian lain bagi membekalkan tenaga elektrik yang memenuhi permintaan sepanjang masa.

Kini, kapasiti maksimum elektrik semua janakuasa yang dikendalikan oleh TNB ialah sebanyak 4,300 megawatt (MW) berbanding dengan permintaan di sekitar 4,600 MW.

Syarikat itu menghadapi masalah untuk membekalkan permintaan berlebihan sebanyak lima peratus atau kira-kira 300 MW.

“Selaras dengan kedudukannya sebagai sebuah badan swasta, pengurusan TNB perlu mengubah sikap mencerminkan sikap bertanggungjawab dan kreatif,” kata beliau kepada para pemberita selepas menerima kuni-

Samy Vellu berkata: TNB bukan lagi agensi kerajaan dan ia perlu mengubah sikapnya bagi membekalkan elektrik yang mencukupi dan tanpa gangguan.

Bagaimanapun Samy Vellu tidak mahu Pengerusi Eksekutif TNB, Tan Sri Ani Arope dipersalahkan berikutan krisis tenaga yang berlaku sekarang.

“Masalah tersebut telah lama wujud. Oleh itu, Ani tidak seharusnya dipersalahkan dalam keadaan ini,” katanya.

Laporan

Mengenai laporan kejadian bekalan elektrik terputus pada bulan September tahun lalu, Samy Vellu memberitahu, beliau akan membentangkannya dalam mesyuarat Kabinet pada minggu pertama bulan Mac.

Sebelum ini, beliau pernah menyatakan bahawa laporan itu akan dibentangkan dalam mesyuarat yang berlangsung esok.

“Laporan itu perlu ditaip semula dan akan diserahkan pada awal bulan Mac ini,” katanya.

Laporan tersebut disampaikan oleh sebuah syarikat pakar perunding, National Grid Company dari Britain.

Samy blames cuts on red tape

17 FEB 1993

By AHMAD ZUBER
IBRAHIM

KUALA LUMPUR: Government red tape is the cause of the current energy crisis, says Energy, Telecommunications and Post Minister Datuk Seri S. Samy Vellu.

He said the problem could have been averted if bureaucracy had not shelved plans for power generating projects until it was too late.

The delays in implementing the projects came about as proposals by Tenaga Nasional Bhd to build more power plants were put on hold, he said.

"It is about time we get out from all this red tape. The electricity industry

cannot be bogged down by red tape any more. Decisions to put up power stations must be made immediately, not three months later.

"In future we are not going to keep quiet if somebody tells us not to spend. When a proposal is made it has to be implemented. We cannot agree to any shelving of projects, otherwise we will be the one facing the music later on."

Speaking to reporters after meeting Swedish Transport and Communications Minister Mats Odell, Samy Vellu said the Tenaga management needed a change in attitude to cope with the increasing demand for power.

He was confident that the power problem could be solved in a year and that the Sept 29 nationwide power blackout would not be repeated.

On the meeting with the Swedish Minister, Samy Vellu said they discussed ways to improve existing ties in telecommunications and postal services.

Ericsson of Sweden was one of five companies recently awarded contracts to expand telephone lines from three to five million in five years.

K. Kasturi Dewl reports from Penang that the state government will have a schedule to allow factories to reduce power consumption by 10 per cent with minimum disruption to production.

Chief Minister Dr Koh Tsu Koon said the Penang Development Corporation would draw up the schedule to be implemented on a rotation basis.

The PDC met representatives of the Federation of Malaysian Manufacturers, northern branch, Frepanca and Tenaga district manager yesterday.

Dr Koh said the proposed schedule would recommend a group of factories in their respective zones to stop operations once every 10 days.

In this way, each factory in the Bayan Lepas Free Trade Zone and the Prai Industrial Zone would have a stretch of seven to 10 days of full operation with minimum power disruption.

Call Tenaga hotline on power disruptions

KUALA LUMPUR: The public and industries can call the Tenaga Nasional hotline to ask about power disruptions.

They can dial ☎ 03-282-7551 or ☎ 03-282-7548 between 8am and 5.30pm.

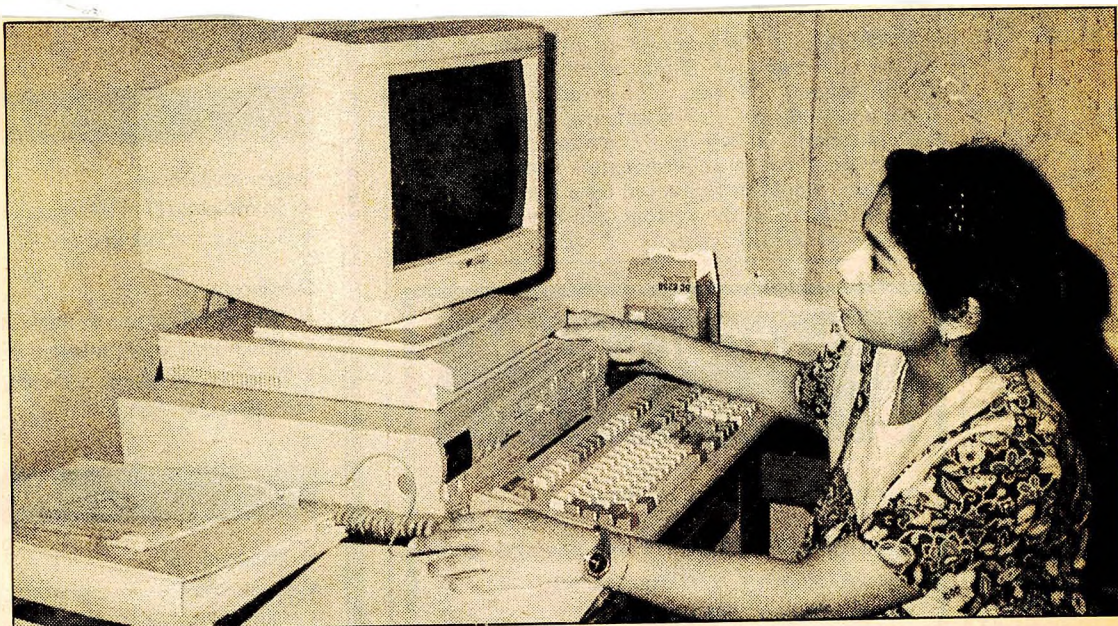
As Tenaga copes with an increasing number of calls from irate consumers who have had

their power supply cut without notice, a spokesman said yesterday that industries could reduce their power consumption by as much as 30 per cent if they followed certain steps.

He recommended that computers and printers, for example, be turned off when not in use and that lighting be reduced.

"Even the number of escalators in use in shopping complexes can be reduced," he added.

The spokesman also said more commercial and industrial sectors would be invited to take part in discussions with Tenaga on ways to reduce power consumption.



A computer technician keying in the data to update the Consumer Restoration Management System

Tenaga's restoration system

16 FEB 1997
STAR

By EDWARD RAJENDRA

TENAGA Nasional Berhad has introduced the Consumer Restoration Management System to enhance both customer service and efficiency of its supply management centres.

The system is able to pinpoint faults quickly and get the relevant information out faster to service teams in the field.

At present, 17 Tenaga Nasional supply management centres in Malaysia are utilising the new system — Petaling Jaya, Klang, Kajang, Shah Alam, Malacca, Muar, Ipoh, Batu Pahat, Seremban, Johor Baru, Taiping, Alor Star, Sungai Petani, Kuala Terengganu, Penang, Butterworth, and Kota Baru.

Kuala Lumpur's North and South zones are in the process of installing the system.

The system involves extensive integration of textual databases; maps are used to assist each centre in restoring supply to disrupted areas.

The system was developed by Hydro-Quebec of Canada.

The Bangsar supply management centre is in the process of installing the system.

Supply engineer Chan Chee Wah said there would be four operator terminals and three graphical display units for the supervisors. It would be the largest of the centres to operate the system.

At present the centre is gathering data on low voltage feeders, substa-

tions, shoplots, factories and electrical addresses of consumers.

This information would be incorporated in the graphical and text databases.

The system will help to locate affected areas, determine faults, monitor customer callback and display maps so the fault can be located, among other things.

"The information collected will help us identify the cause of electrical faults easily," Chan said.

He also said the system is effective as information is available upon demand, and can be immediately relayed to service teams in the field.

The affected area can be located on the screen within a minute.

Ani: Save energy now before it's too late

By AHMAD ZUBER
IBRAHIM

KUALA LUMPUR: Malaysians must reduce power consumption now or face a bigger energy crisis in three months.

Tenaga Nasional executive chairman Tan Sri Ani Arope said yesterday consumers had no choice but to reduce usage as the power generated could not meet demands during peak hours.

"This is because our turbines need to undergo scheduled maintenance. If we don't take our medi-

cine now, we will have a major power breakdown in less than three months," he told reporters after launching Tenaga's save energy campaign.

Ani said under the one-year campaign, Tenaga hoped consumers could reduce consumption by 10 per cent during peak periods or high load (10am-12.30pm and 2pm-5pm).

It also wants manufacturers to change working hours, postpone certain processes to off-peak periods and reschedule work shifts.

To encourage the manufacturers' participation, Tenaga proposes to give them rebates.

"We have had complaints from the Penang Chief Minister and the mentris besar of Johor, Perak and Selangor. As far as Tenaga is concerned, the present situation warrants it," Ani said.

He said the management considered criticisms against Tenaga fair comment as they were meant well.

He said delays in implementation of power-gen-

erating projects could not be helped as the approval process took time.

Tenaga has an installed capacity of 5500 MW but only 4500 MW was available due to scheduled maintenance of turbines.

"Sometimes, it gets lower than 4500 MW. This is inadequate to cope with the maximum demand of 4600 MW.

"A five per cent reduction will prevent the need for load-shedding. Hopefully, the situation will be back to normal by February next year," said Ani.

He said offices could

play a role by switching off or reduce usage of air-conditioners, lights, lifts and other non-essential facilities.

The public could refrain from using electrical gadgets like rice cooker, iron and kettles during peak periods.

Ani said other scheduled maintenance and repairs of generating units, unforeseen breakdowns, delays in implementing projects and the high growth rate in industries had not helped the situation.

He added that since last

October load-shedding or power interruption exercise were done over 20 days involving shortage of between 40 MW and 230 MW.

Tenaga has also received approval for power projects costing RM1.6 billion capable of generating some 1000 MW.

By the year 2000, he said Tenaga hoped to implement projects capable of generating 1000 MW per year. This will bring the capacity installed to 13000 MW with demand of between 9000 MW and 10000 MW.

FMM kemuka laporan ^{BH} 16 FEB 1993 kepada TNB

PERSEKUTUAN Pekilang-Pekilang Malaysia (FMM) akan mengemukakan laporan lengkap kepada Tenaga Nasional Berhad (TNB) mengenai sambutan pengusaha sektor perindustrian di negara ini terhadap cadangan menukar jadual operasi kepada waktu malam, minggu depan.

Pengarah Eksekutif FMM, Tan Keok Yin, berkata persekutuan akan menerima maklum balas daripada semua 1,300 ahlinya di seluruh negara Khamis ini berhubung cadangan itu yang bertujuan mengurangkan masalah gangguan bekalan elektrik.

Menurutnya, FMM pusat akan mengumpul semua maklum balas itu dan merumuskannya sebelum dikemukakan secara lengkap kepada TNB.

"Sehingga ini semua

ahli sedang menyiapkan maklum balas masing-masing untuk dikemukakan kepada FMM pusat.

"FMM kemudiannya akan menyampaikan sambutan itu kepada TNB minggu depan dan sekaligus membincangkannya secara terperinci," katanya selepas majlis pelancaran buku direktori FMM ke 24, di Kuala Lumpur, semalam.

Sebelum ini, Menteri Tenaga, Telekom dan Pos, Datuk S Samy Velu mengumumkan supaya pengusaha kilang menimbang kemungkinan beroperasi pada waktu malam bagi mengatasi masalah kekurangan bekalan elektrik sepanjang tempoh sibuk.

Tan berharap segala masalah dihadapi itu akan dapat diselesaikan dengan segera dan berkesan oleh TNB.

Jimat atau bergelap — TNB

16 FEB 1993

KUALA LUMPUR 15 Feb. — Seluruh negara akan mengalami gangguan bekalan elektrik yang lebih teruk daripada gangguan elektrik September tahun lalu, jika para pengguna terutama sektor perindustrian tidak berupaya menjimatkan penggunaan tenaga elektrik dalam tempoh tiga bulan akan datang.

Pengerusi Eksekutif Tenaga Nasional Berhad (TNB), Tan Sri Ani Arope berkata, ini kerana TNB terpaksa melakukan kerja-kerja penyenggaraan, baikpulih dan ubahsuaian unit-unit janakuasa yang ada secara bergilir-gilir untuk mengelakkan kerosakan lebih teruk dan boleh menyebabkan gangguan bekalan elektrik.

Pada masa sekarang, katanya, permintaan tenaga elektrik sehari pada waktu puncak iaitu dari pukul 8 pagi hingga 5 petang ialah 4,600 megawatt (MW) sedangkan kapasiti maksimum semua janakuasa hanya 5,567 MW.

Beliau berkata, daripada jumlah kapasiti maksi-

mum itu, kuasa yang tidak dapat digunakan ialah 1,000 MW atas sebab-sebab kerja penyenggaraan berkenaan.

“Oleh itu, tidak ada jalan lain, selain penjimatan tenaga elektrik di kalangan pengguna atau kita akan menghadapi gangguan dari semasa ke semasa dalam keadaan yang lebih teruk,” katanya pada sidang akhbar mengumumkan Kempen Penjimatan Tenaga Elektrik bertemakan ‘Gunakan Elektrik Dengan Bijak’ di Ibu Pejabat TNB di sini hari ini.

Kempen itu bermula hari ini bertujuan menimbulkan kesedaran di kalangan pengguna melalui pengedaran poster, pelekat dan penyiaran iklan di televisyen, radio dan akhbar serta panduan bagaimana menjimatkan penggunaan elektrik.

Ani berkata, kempen yang bertujuan agar penggunaan tenaga elektrik dapat dikurangkan kepada 10 peratus pada waktu puncak, akan berjalan selama setahun.

Wartawan ‘mangsa’ pertama bergelap

KUALA LUMPUR 15 Feb — “Gunakan Elektrik Dengan Bijak”... begitulah tema Kempen Penjimatan Tenaga Elektrik yang dianjurkan oleh Tenaga Nasional Berhad (TNB) untuk menangani krisis tenaga yang semakin memuncak di negara ini.

Sesuai dengan kempen itu, ‘mangsa’ pertama ialah para wartawan yang membuat liputan pelancaran dan sidang akhbar oleh Pengerusi Eksekutif TNB, Tan Sri Ani Arope mengenai kempen itu di Ibu Pejabat TNB di sini hari ini.

Apa yang terjadi ialah apabila Ani Arope memasuki bilik persidangan, beliau telah mengarahkan sebahagian daripada lampu di bilik itu ditutup sambil berkata “ini bertujuan menjimatkan elektrik dalam bangunan TNB sendiri.”

Tenaga takes full blame for spate of power failures

By Zainul Arifin 16 FEB 1992

KUALA LUMPUR, Mon. — Tenaga Nasional Bhd is taking full responsibility for the spate of power failures in the country over the last few months and assures consumers that it is doing its best to address the problem.

"The buck ends here," its executive chairman Tan Sri Dr Ani Arope said today.

Speaking to reporters at the launch of its energy conservation campaign "Use electricity wisely", Ani said:

"We have to take full responsibility for whatever has happened.

"We do not want to point an accusing finger at anybody."

Asked whether the criticisms levelled at him and Tenaga over the power shortages were fair, Ani answered: "I think any criticism which is for us to improve is fair."

Many quarters had criticised Tenaga for lacking the foresight to plan for the rapid industrialisation and the escalating electricity consumption, which for last year grew by slightly more than 12 per cent.

However, Ani said that the decision to build new power plants did not rest with Tenaga as it involved

many parties, among whom were the Government.

"If it is only Tenaga, then decision-making will be much faster," he said.

Nevertheless, he said, the company was spending about RM1.6 billion to install new generating facilities which could produce about 1,000MW.

These facilities would be completed in stages and would be ready by the end of next year.

"Money at the moment is not a constraint, only time," he said.

While admitting responsibility for the power failures, Tenaga is urging the consumers to reduce their electricity consumption.

Tenaga is undertaking a RM1 million year-long multi-media campaign urging consumers to limit the use of electricity by about 10 per cent, especially during the peak period of between 10am and 5pm.

It will offer incentives, in the form of rebates, to industries to shift their operations to off-peak periods.

On reports that there were suggestions of legal action to seek compensation for losses due to the power

Move to reduce electricity durin

FROM PAGE ONE

failures, Ani said:

"The question of compensation does not arise at the moment. What is important is to get the nation's power supply in order."

He said a major breakdown in power supply might occur within three months if there was no attempt to reduce usage of electricity and if the scheduled maintenance of power-generating units was not done on time.

Thus consumers — household, industrial, commercial or mining sector — should help by reducing their consumption.

"What other alternatives do we have?" he asked.

At any one time, turbines had to be shut off for scheduled maintenance despite the strong demand for electricity, and the installation of new generating units will only be able to address the power shortage by next February.

The campaign will be carried out concurrently with an annual drive organised by the Ministry of Energy, Telecommunications and Post.

"We want to bring (energy savings) into focus now that the spectre (of power shortages) is real," he said.

Tenaga aims to reduce consumption of electricity

by about 10 per cent for the peak periods from 10am to 12.30pm and from 2pm to 5pm.

At present, demand during the peak periods is 4,600MW. Although Tenaga has an installed capacity of 5,567MW, scheduled maintenance means generating capacity totalling about 1,000MW is lost at any one time.

Ani said a reduction of even about five per cent in usage would slash the demand by 230MW, which he said would prevent the need for load shedding.

Apart from scheduled maintenance, unforeseen breakdowns of generators, delays in the completion of new power projects as well as the high growth rate in the country also contributed to the strong demand.

Ani said consumers, especially high users of electricity in industries, should consider Tenaga's suggestion that they operate during off-peak periods by changing working hours, postponing certain processes to low demand periods, and rescheduling shifts.

To encourage such a move, Tenaga is proposing to the Federation of Malaysian Manufacturers (FMM) a package of incentives which include rebates on

beyond this critical period.

Tenaga is also trying to speed up work on turbines undergoing modifications or scheduled maintenance as well as increasing the installation of new generators.

By the end of the year, it hopes to increase its electricity supply by more than 485MW, and by February next year a further 110MW.

At the end of next year, it will raise its electricity generating capacity by 1,625MW. This will raise the total generating capacity to 7,787MW. The maximum demand expected then will be about 5,800MW.

Tenaga and independent power producers are planning to install equipment to raise the output by 1,000MW each year until the year 2000. Total capacity will then be about 13,000MW with demand projected to be between 9,000MW and 10,000MW.

"This will give us a comfortable generating reserve of between 2,000MW and 3,000MW," he said.

electricity. However, due to the demand, Malaysia will be a net importer of electricity in a few months.

Tenaga will also give three days' notice of any interruptions in power supply due to its load-shedding exercise.

The exercise, carried out since last October at an average of 20 times a month, allowed Tenaga to save between 100MW and 125MW every day.

The company is encouraging those with power generators to use them during peak periods.

Consumers in Peninsular Malaysia are encouraged to reduce their electricity consumption for lighting purposes by about 30 per cent.

It has identified equipment that could be switched off or their usage reduced during peak periods. They include air-conditioners, lights and lifts.

As for domestic consumers, Tenaga is discouraging the use of items such as rice cookers, electric irons, kettles and water heaters during peak hours.

PLEASE TURN TO PAGE 2, COL 5

BID TO CUT CONSUMPTION BY 10pc

Tenaga launches 'save power' drive

16 FEB 1993

TENAGA Nasional has launched a nation-wide "save electricity" campaign aimed at reducing power consumption by at least 10 per cent during the peak hours, 10am to 5pm.

Chairman Tan Sri Ani Arope said with a 10 per cent reduction in consumption, Tenaga will not need to undertake load shedding or power interruption exercises to overcome the problem of insufficient power supply.

"During the one-year campaign, we will seek the cooperation of all consumers — industrial, commercial and household — to help reduce electricity consumption. "We hope the industrial and commercial sectors will be able to adjust their working hours and certain processes to the off-peak peri-

od.

"Tenaga will also come out with an incentive scheme before the end of the month to encourage manufacturers to use the off-peak tariff. Tenaga will discuss the proposed incentive with the Federation of Malaysian Manufacturers before finalising it," he told a news conference in Kuala Lumpur yesterday.

Ani said equipment that can be switched off or whose usage can be reduced during the high-load period include air-conditioners, lights, lifts and other non-essential facilities.

Domestic consumers can avoid using rice cookers, irons, kettles and water heaters during peak hours.

"A RM1 million budget has been allocated for the

campaign. Meetings with consumers on how to reduce power consumption at state level have already started," he added.

The maximum power demand during peak hours is 4,600MW and a 10 per cent reduction during the high load period will be 460MW. The total usage of electricity during night-time, or off-peak period, is only 2,600 MW.

Although Tenaga has the capacity to supply up to 5,567MW, due to reasons such as scheduled maintenance and repairs to existing generating units and delay in the completion of new generation projects, its power capacity is reduced by 1,000MW.

The shortage in power supply is also due to high

demand growth and unforeseen breakdowns of existing generating units.

"The situation is expected to return to normal in February 1994 if the planting-up plan goes according to schedule. Besides putting up new generators, Tenaga is also negotiating to import power from Singapore and Thailand during high-load periods," said Ani.

By the end of this year, Tenaga hopes to increase its capacity by 485MW. By February 1994, capacity will be increased by a further 110MW and by the end of 1994, an additional 1,625MW.

"By the end of 1994, Tenaga will have a total capacity of 7,787MW, while the maximum demand expected is 5,800MW," said Ani. — By Kartini Abd. Kadir

3 more gas turbines to be bought

By SITI HAJJAR SULAIMAN

THE Energy, Telecommunications and Posts Ministry is speeding up the purchase of three additional gas turbines and the power crisis can be over within seven months — faster than expected.

Its minister, Datuk Seri S. Samy Vellu, said in Kuala Lumpur yesterday the ministry will not allow the power crisis to continue and it has taken various steps to buy additional turbines to counter the problem, adding that the three being bought can generate a total of 375 megawatts (MW).

Samy Vellu said the ministry has identified several parties who have machines in ready supply.

"When the question of power crisis arises, everybody has to cooperate to a certain extent. This requires sacrifices, as power generation is not a cheap investment," he said.

Samy Vellu was speaking to reporters after receiving Umno delegates from Kampung Lintang, Sungai Siput, yesterday. The delegates, comprising some 40 people, are on a study tour to learn the roles and functions of the ministry.

A US company was reported to have agreed to install the three gas turbines, each able to supply 125MW, in six months' time.

To date, Tenaga Nasional has awarded contracts worth RM900 million to three companies for the installation and maintenance of seven gas turbines at two power plants being built in Malacca and Serdang.

The companies are John Brown Engineering (JBE), Marubeni Corp and Siemens. Marubeni will install and maintain two 110MW gas turbines in Malacca, while JBE will put up two similar turbines at Serdang, where Siemens will install three 315MW gas turbines.

Tenaga executive chairman Tan Sri Ani Arope said the installation of these turbines is part of Tenaga's long-term plan to overcome the country's power shortage.

Tenaga has also awarded contracts worth RM700 million to five contractors to supply and maintain 10 industrial turbines for the company's plants in Selangor and Johor.

The installation of the 17 gas and industrial turbines will increase Tenaga's power supply capacity by 1,000MW a day.

At present, Tenaga has the capacity to supply 5,500MW of electricity a day. Demand for electricity now is about 365MW more than what Tenaga can supply during the peak hours between 10am and 5pm.

He said the ministry is also considering the possibility of Tenaga setting up joint ventures with private parties to install and run the operations of a newly incorporated entity.

FMM to submit working paper on crisis to Tenaga

16 FEB 1993

By LOKMAN MANSOR

THE Federation of Malaysian Manufacturers (FMM) will submit a working paper on electricity supply interruptions to Tenaga Nasional at the latest by early next week.

FMM executive director Tan Keok Yin said he is waiting for the survey returns from its 1,300 members on their views on rescheduling operations to the night.

Speaking to reporters after the launch of the 1993 FMM Directory in Kuala Lumpur yesterday, Tan said the survey also seeks to know the additional costs and difficulties such a rescheduling will involve, and the average daily electricity the members consume.

"Tenaga has given us 10 days (until February 20), to submit the feedback," Tan said. "If we get the returns by this Thursday, we can come up with a set of proposals."

SUMMARY OF FINANCIAL LOSSES BY STATE

	Total loss (RM)	No of companies
Johor	14,135,982.89	37
Kedah	1,950,000.00	2
Kelantan	20,000.00	1
Kuala Lumpur	6,481,335.00	21
Malacca	1,341,762.25	17
Negri Sembilan	217,125.00	3
Pahang	282,968.00	3
Penang	4,097,476.64	23
Perak	2,042,970.00	17
Selangor	19,726,497.29	72
	50,296,117.07	196

BT table

The meeting with Tenaga on February 10 was significant in that the utility company admitted there is a problem supplying electricity to the manufacturing sector, and that cooperation

is needed to come up with a solution.

However, the FMM would like to see the supply problem resolved quicker than the nine to 12 months suggested, Tan said, as this is

not just a power crisis but also one of confidence.

The sooner the problem is solved the better for the image of the country and the sooner for investors to go ahead with their business plans, he said.

The electricity interruptions gives Tenaga a bad name, Tan said. "Tenaga definitely has to restore the confidence that has been eroded," he said.

Tan said the recent directive from Tenaga asking manufacturers in the Northern region to cut their electricity consumption by 10 per cent is not an encouraging one.

It is bad enough that Tenaga cannot supply the electricity needed by manufacturers, he said. Now, the company is asking manufacturers to limit their consumption, which may lead to substantial losses.

"I am surprised," he said. "This creates another dent in our confidence in Tenaga."

Breakdowns cause of water supply cut

FREQUENT power breakdowns and a weak pipe distribution system are the major causes of disruption of water supply to the Larkin industrial area in Johor Baru.

Johor Waterworks Department (JBA) director Mohamad Hatta Bakri said yesterday the Sungai Layang water treatment

plant cannot operate without electricity supply. The old pipe distribution system also often bursts and leaks.

Commenting on complaints by factories on the frequent disruption in water supply, he said the Larkin industrial area draws its water from a water tank located on ground higher than another nearby tank.

Water can only flow into the higher tank when the lower tank is full, he added.

Mohamad Hatta said water supply has to be gradually restored after any repairs to the pipes to avoid sudden a pressure build-up that can cause pipes in other areas to burst.

He also said investigations

by the department showed that many factories changed their type of activities without modifying the pipe system to meet the new requirements. Nevertheless, JBA provides tankers to distribute water to affected areas whenever disruption in supply occurs, he added. — Bernama

No rise in electricity tariffs proposed



□ **SAMY VELLU** ... Tenaga to bear all costs.

NO NEW increases in electricity tariffs are proposed to pay for the cost of power in the present energy crisis facing the country.

Minister of Energy, Telecommunications and Posts Datuk Seri S. Samy Vellu said whatever costs incurred to develop new energy projects will be borne by Tenaga Nasional Berhad and not passed on to end-users.

Speaking to reporters after chairing the Sungai Siput MIC division meeting in Sungai Siput on Saturday night, he also said concession rates for industries which re-scheduled their hours of operation will be issued in 10 days after discussions between Tenaga Nasional and the Federation of Malaysian Manufacturers (FMM).

The concession will only

be given to factories which complied with Tenaga Nasional's advice to operate at night when demand for power was less, he added.

Samy Vellu said Tenaga Nasional is expediting the purchase of gas turbines from abroad as a short-term measure to overcome the current energy crisis.

Several companies have responded and one from the US has agreed to supply three gas turbines in six months which can provide 135 megawatts of electricity, he added.

He had directed Tenaga Nasional to immediately look into the matter and its executive chairman Tan Sri Dr Ani Arope is expected to submit a report today.

He said the Government will hold discussions with Singapore to buy 200 mega-

watts of electricity under the cooperation in power supply agreement with neighbouring countries.

The Foreign Ministry is arranging the meeting with the Singapore Ministry of Trade and Industry.

On the question of compensation to factories which suffered losses because of the September 29 nationwide power failure, he said in principle the Government does not propose to pay compensation.

Nevertheless, the Government will refer the matter to several parties to determine whether or not compensation has to be paid from the legal point of view.

"If we pay compensation, there may be parties which may take the opportunity to ask for compensation for all breakdowns after that," he

said.

The FMM said yesterday that 196 of its members suffered losses totalling nearly RM219 million as a result of the power disruption in September.

Samy Vellu reiterated the assurance that the power crisis will not adversely affect the country's industrialisation policy and the opening of new factories already committed for this year.

He said short-term plans being drawn up by Tenaga Nasional will be able to supply an additional 1,000 megawatts of electricity by year's end to meet the needs of the new industries.

Tenaga Nasional is also drawing up plans to meet the needs for power supply up to the year 2000 and beyond. — Bernama

BT
15 FEB 1993

Pelik elektrik sering putus

um

15 FEB 1993

Saudara Pengarang,

SAYA mewakili penduduk daerah pekan Grik ingin menyuarakan rasa dukacita dan tidak puas hati dengan pengurusan bekalan elektrik oleh Tenaga Nasional Berhad (TNB) sejak akhir-akhir ini.

Bekalan elektrik sering terputus tidak kira siang atau malam. Kejadian ini bukan sekali setahun atau sekali dalam sebulan tetapi boleh dikatakan dalam seminggu pasti ada dua tiga kali gangguan ini berlaku. Tidak munasabah mesin janakuasa elektrik sering mengalami kerosakan teknikal, lainlah kalau ada ribut atau taufan, ini angin pun tak bertiup tiba-tiba bekalan elektrik terputus. Malah, gangguan berlaku bukannya sekejap antara sejam dua tetapi sehari suntuk.

Untuk pengetahuan pihak yang tertentu, jarang sekali notis diberikan sebelum gangguan berlaku. Hal ini sudah tentunya menjejaskan segala aktiviti di daerah kami. Adakah cara ini pihak TNB menunjukkan kecekapannya setelah diswastakan dan seterusnya menyahut cabaran wawasan.

Malangnya lagi, yang menjadi tanda tanya kami mengapakah gangguan elektrik berlaku pada hari Ahad dan cuti-cuti umum? Adakah pada waktu-waktu begitu mesin janakuasa pun hendak bercuti?

Saya berharap TNB berusaha untuk terus mengatasi masalah ini dengan mengambil langkah-langkah yang sewajarnya. — **TERKILAN, Irna, Grik.**

TNB tambah keupayaan

BH
15 FEB 1993

SUNGAI SIPUT, Ahad — Tenaga Nasional Berhad (TNB) akan menambah keupayaan bekalan tenaga elektrik sebanyak 1,000 megawatt lagi menjelang hujung tahun ini bagi memenuhi keperluan sektor perindustrian di seluruh negara.

Menteri Tenaga, Telekom dan Pos, Datuk Seri S Samy Vellu, berkata ia boleh dicapai dengan membina lebih banyak turbin gas serta membeli bekalan tenaga elektrik stesen janakuasa Thailand dan Singapura bagi menambah keupayaan bekalan yang sedia ada, iaitu 4,300 megawatt sehari.

"Bekalan elektrik tambahan sebanyak 1,000 megawatt itu dijangka berupaya memenuhi keperluan industri di seluruh negara, sekaligus menamatkan krisis kekurangan bekalan tenaga yang berlaku sejak beberapa bulan lalu," katanya.

Bercakap kepada pemberita selepas mengadakan mesyuarat dengan pemimpin MIC Bahagian

Sungai Siput semalam, beliau berkata, pihaknya sedang menyegerakan pemasangan tiga buah turbin gas yang mampu menyalur tenaga elektrik sebanyak 375 megawatt.

Katanya, sebuah syarikat dari Amerika Syarikat bersetuju memasang turbin gas itu dalam tempoh enam bulan dengan setiap turbin itu mampu membekalkan kira-kira 125 megawatt.

"Syarikat terbabit dijangka mengemukakan kertas kerjanya esok kepada kementerian dan TNB diminta berunding berhubung kos diperlukan bagi membiayai pembinaan turbin gas itu.

"Saya sendiri akan menemui Pengerusi TNB, Tan Sri Ani Arope, bagi menimbang khidmat syarikat profesional terbabit, sekaligus menamatkan krisis kekurangan tenaga elektrik di negara ini," katanya.

Ketika ditanya mengenai pembelian tenaga elektrik daripada Singapura, Samy Vellu berkata,

pihaknya kini menunggu maklum balas Wisma Putra yang bertanggungjawab mengatur pertemuan di antara Kementerian Tenaga, Telekom, dan Pos dengan Menteri Perdagangan Singapura.

"Usaha seumpama itu perlu dibuat walaupun kerajaan tidak begitu pasti negara terbabit bersedia menjual bekalan tenaga elektrik sebanyak 200 megawatt kepada Malaysia," katanya.

Sehubungan itu, Samy Vellu berkata, TNB memberi jaminan tidak akan menaikkan tarif bayaran elektrik terhadap orang ramai serta pengusaha industri di seluruh negara berikutan beberapa kos baru menambah keupayaan bekalan tenaga pada masa akan datang.

"Orang ramai dan pengusaha industri masih tertakluk pada harga lama walaupun pelbagai projek membaikpulih serta menambah keupayaan bekalan tenaga elektrik dilakukan pada masa depan," katanya.

Tenaga must bear all costs incurred

By K.Y. PUNG

STAR
15 FEB 1993

SUNGAI SIPUT: The Government will not raise the electricity tariff to meet the cost of increasing power supply.

Energy, Telecommunications and Post Minister Datuk Seri S. Samy Vellu said Tenaga Nasional would bear all the costs incurred.

He also said concession rates for industries which re-scheduled their hours of operation would be issued in 10 days, after Tenaga met the Federation of Malaysian Manu-

facturers (FMM).

The concession would be given only to factories which operated at night, he said after meeting MIC leaders on Saturday.

Samy Vellu said Tenaga hoped to resolve the energy crisis by installing additional turbines and sourcing temporary supply from neighbouring countries.

An American company, which has agreed to install three gas turbines, is to submit its proposal to the ministry today.

Samy Vellu said he was also awaiting a reply from

Wisma Putra which was arranging a meeting between his ministry and the Singapore Trade and Industry Ministry.

The republic has been asked to supply 200 megawatts of electricity daily.

By the end of the year, Tenaga's supply would have increased by 1,000 megawatts from its current output of 4,300 megawatts a day, and this would be sufficient to meet the demand, he said.

On compensation to factories which suffered losses because of the Sept 29 nation-wide power fail-

ure, he said the Government did not in principle propose to pay anything.

Nevertheless, the Government would seek legal advice on the matter.

"If we pay compensation, certain parties may ask for compensation for all future breakdowns," he said.

The FMM said on Saturday 196 members had suffered losses totalling nearly RM219 million as a result of the September power disruption.

■ Seeking an end to the current crisis - P17

Tenaga's request upsets Penang

PENANG: The state government is upset over Tenaga Nasional's request to factories here to reduce power consumption by 10 per cent with immediate effect.

Chief Minister Dr Koh Tsu Koon said Tenaga should have notified the factories earlier.

He said the factories would suffer losses if they were to cut down consumption immediately when production was in full swing.

"We are upset as we had invited these companies to invest in Penang with the assurance of

good infrastructure and facilities," Dr Koh told newsmen after attending the Pertubuhan Bunga Tanjung first annual general meeting at Mar Vista Resort yesterday.

"We have to live up to these expectations."

He said he would try to work out a solution with Tenaga today.

The Federation of Malaysian Manufacturers (FMM), northern branch, had complained to the Penang Consumers Council at a meeting on Saturday that it was "difficult for factories to reduce

consumption suddenly as they had to meet their production targets".

Dr Koh said Tenaga should plan its schedule properly and only call for a cutdown in consumption if it was truly unavoidable.

"This must also be done way ahead of schedule so that manufacturers can make the necessary preparations," he said.

Dr Koh also hoped that more power plants could be set up as soon as possible in the state to meet increasing demands.

High time Tenaga told the whole truth to consumers

BIZ TALK

By Shaik Osman Majid ^{NST}

15 FEB 1993

THE whole truth on the power shortage has not been told. The crisis has now been termed a "national problem" by Tenaga Nasional Bhd's chairman to justify his public plea for domestic conservation and industrial production shift.

But published facts indicate Tan Sri Dr Ani Arope has not told all clearly and succinctly about the listed utility company's capability to generate, transmit and distribute electricity to meet the demands of consumers in the peninsula.

In sum, Tenaga does not reveal, or rather had not for several months, revealed the entire story of its generation capacity.

First let us examine the stated statistics of power generation.

Since the week after that national blackout on Sept 29 last year that engulfed nine States, we have been told that Tenaga has an installed capacity to generate 5,500 megawatts. Such an optimum production is, we were and still are given to know, 20 per cent more than the peak daily need of industry, commerce and households which is pegged at no more than 4,500 megawatts for the hours between noon and 4pm or 5pm.

The margin of reserve is laudable. But sporadic interruptions in supply have persisted, on occasions limited to specific localities but in other instances, spreading out to black out entire States.

For the naive who had the temerity to ask why, Tenaga had a standard and seemingly logical explanation. Complainants, including the Press, were told that power stations and their turbines have to be maintained.

Servicing requires these machines to be shut down. Thus at any given time two or more stations are never operational. The latest explanation says many or most of the turbines are old,

requiring more frequent maintenance. Which is why the installed capacity is not delivered and the reason for interruptions in supply.

A simple answer, received as valid when given but dubious upon rigorous analysis. And any analysis should begin with facts. One is widely known: electricity cannot be stored. It must be used once it is generated.

Tenaga's prospectus on its public issue prior to listing in the local exchange, dated Feb 29, 1992, paraphrases succinctly this basic limitation of power generation: "The fact that electrical energy once produced needs to be utilised (i.e. it cannot be stored, unlike petroleum or coal) means that production has to precisely match demand."

From this statement we infer one assumption: that Tenaga generates only the demand for supply, no more. Thus installed capacity of generation is an irrelevant figure and the frequently trotted out 5,500 megawatts statistics should be thrown into the wastebin.

The second assumption is: Tenaga was only producing 4,500 megawatts in the past to meet the peak demands between noon and 4pm or 5pm. This means it can close down three or more of its 15 power stations, which have a total installed generation capacity of 5,500 megawatts, on any given day to maintain adequate supply even during the most demanding hours.

Last Thursday, however, Ani Arope pronounced a telling revelation: Tenaga can only supply about 4,105 megawatts, 395 megawatts short of the peak demand. In

other words, this shortage works out to 30 per cent less than the installed capacity of 5,500 megawatts.

From these statistics we are to assume that about five of the 15 power stations are shut down daily. But then, only three of the generating plants have the capacity to produce more than 500 megawatts; one is capable of turning out only 40 megawatts, another 72 megawatts.

Thus we would like to ask Ani Arope, chairman of Tenaga Nasional Bhd, which of your 15 main stations are shut down for maintenance today? Which of these stations, moreover, have old turbines that demand more than regular servicing?

If you, Tan Sri, or your officials knew that the stations have old turbines, what plans were drawn up to have new machines installed? Or did you and your officials realise this fact only after the national blackout of Sept 29?

Be that as it may Tenaga Nasional Bhd must accept blame for poor planning. It should have realised that the country has been experiencing a surge in development, requiring infrastructure needs of which the most basic for industry is electricity.

Tenaga was corporatised in 1990. It should have recognised then the demands investment, both local and foreign that had been pouring into the country since 1987, would ask in terms of electricity.

Investments figures are not top secret statistics. They have always been publicly touted. And a company involved in supplying the basic need of electricity

should have been well aware of current and future demands.

Which calls for planning. This is another area, we must conclude from the present problems, where Tenaga has failed.

In the final analysis, it is pointless to blame Tenaga. Rather we should devote attention and energy to solutions to overcome the vexing problems of interruptions in the supply of electricity. For consumers like you, the reader, it is an irritation and a frustrating inconvenience. For business, it means losses, huge losses. The Federation of Malaysian Manufacturers says that industries might have incurred a loss of RM219 million as a result of the Sept 29 blackout. What of other losses triggered by similar but not necessarily nationwide interruptions in power?

The Cabinet has resolved on one, perhaps the best resolution: invite the private sector to generate and supply electricity which Datuk Seri Rafidah announced on Friday. Her colleague, Datuk Seri Samy Vellu for unfathomable reasons, has other thoughts. He is of the view that the monopoly of transmission and supply of electricity should still vest with Tenaga.

But consider this fact: Monopoly leads to complacency. Service, in the case of Tenaga, is what it is willingly to dispense, at its will and pleasure; the needs and requirements of the consumers do not seem to matter, even though they are the paymasters.

We cannot live without the provision of three basic utilities — electricity, water and telephone. All three services have their hiccups. In recent months, the first two have given the most headaches. Time then to consider competition. Let us begin with facilitating more companies to generate, transmit and supply electricity.

Kadar tarif elektrik tidak naik

4M 15 FEB 1993

SUNGAI SIPUT, 14 Feb — Kerajaan tidak bercadang menaikkan kadar tarif elektrik untuk menampung kos bekalan tenaga berikutan krisis tenaga yang dihadapi sekarang, kata Menteri Tenaga, Telekom dan Pos, Datuk Seri S. Samy Vellu.

Sebarang kos yang timbul daripada rancangan pembangunan tenaga di negara ini buat masa ini akan terus ditanggung oleh Tenaga Nasional Bhd dan tidak akan dibebankan kepada rakyat sebagai pengguna akhir, katanya kepada pemberita selepas mempengerusikan mesyuarat MIC Bahagian Sungai Siput, di sini malam tadi.

Mengenai kadar konsesi tenaga kepada kilang-kilang yang menjadualkan operasi mereka, beliau berkata, kadar itu akan dikeluarkan dalam tempoh 10 hari selepas Persekutuan Pekilang-pekilang Malaysia (FMM) mengadakan perundingan dengan Tenaga Nasional.

Beliau berkata, kadar konsesi itu akan hanya diberikan kepada kilang-kilang yang mematuhi nasihat Tenaga Nasional untuk menukar waktu operasi mereka kepada

sebelah malam yang kurang penggunaan bekalan elektrik.

Ketika ditanya mengenai rancangan mengatasi krisis tenaga sekarang, beliau berkata, bagi rancangan jangka pendek, Tenaga Nasional sedang menyegerakan pembelian turbin gas daripada syarikat luar negara.

Katanya, beberapa syarikat telah memberi jawapan, termasuk sebuah dari Amerika Syarikat yang bersetuju membekalkan tiga unit turbin yang dapat menampung bekalan elektrik sebanyak 135 megawat, dalam tempoh enam bulan.

Katanya, Tenaga Nasional akan membincangkan perkara itu dan Pengerusi Eksekutifnya, Tan Sri Dr Ani Arope dijangka akan menyerahkan laporan mengenainya esok.

Kerajaan juga akan mengadakan perbincangan dengan Singapura untuk membeli bekalan tenaga sebanyak 200 megawat dari republik itu. Kementerian Luar sedang mengatur pertemuan dengan Kementerian Perdagangan dan Industri Singapura untuk mengadakan perbincangan lanjut bagi tujuan itu, katanya.

Mengenai bayaran ganti rugi kepada pekilang-pekilang berikutan terputusnya bekalan elektrik di seluruh negara pada 29 Sept lepas, beliau berkata, pada dasarnya kerajaan tidak merancang untuk membayar ganti rugi.

Bagaimanapun, katanya, kerajaan akan merujuk perkara itu kepada beberapa pihak dan akan melihatnya daripada sudut undang-undang sama ada pembayaran ganti rugi perlu diberikan atau tidak.

“Jika kita membuat pembayaran ganti rugi mungkin ada pihak yang akan mengambil kesempatan meminta ganti rugi bagi sebarang kerosakan selepas ini,” katanya.

Laporan FMM semalam menyatakan bahawa pekilang-pekilang mengalami kerugian kira-kira RM219 juta berikutan bekalan elektrik yang terputus di seluruh negara pada September lepas.

Beliau juga mengulangi jaminan kerajaan bahawa krisis tenaga yang sedang dihadapi sekarang tidak akan menjejaskan dasar perindustrian negara dan pembukaan kilang-kilang baru pada tahun ini.

Guna tenaga nuklear

Oleh WAHID HASHIM

KUALA LUMPUR 14 Feb. — Kerajaan sedang mengkaji pelbagai cara untuk mengatasi krisis tenaga negara termasuklah kemungkinan penggunaan tenaga nuklear, kata Timbalan Perdana Menteri, Ghafar Baba.

Menurut beliau, jika krisis ini berpanjangan adalah tidak mustahil bagi kerajaan untuk mengkaji kemungkinan menggunakan tenaga nuklear sebagai salah satu sumber tenaga negara.

Kini, katanya, Malaysia menggunakan sumber semula jadi seperti tenaga hidro dan minyak untuk mendapatkan bekalan elektrik.

Bagaimanapun menurut Ghafar, sumber-sumber semulajadi ini tidak mencukupi terutamanya apabila permintaan terhadap bekalan elektrik daripada kilang-kilang memuncak sepertimana

yang berlaku baru-baru ini.

Beliau menyatakan demikian ketika ditanya oleh para pemberita mengenai usaha kerajaan untuk mengatasi krisis tenaga selepas menghadiri Majlis Makan Malam Bersama Media anjuran syarikat minyak MOBIL di sini malam tadi.

Sementara itu, Ghafar juga meminta semua Kementerian supaya mencari sumber kewangan tambahan untuk menampung pertambahan siling peruntukan Rancangan Malaysia Keenam (RM6) yang diluluskan oleh kabinet baru-baru ini.

Katanya, kerajaan akan mengkaji punca-punca yang boleh menambah sumber kewangan negara untuk menampung pertambahan tersebut.

Katanya, kabinet baru-baru ini memutuskan bahawa siling peruntukan sebanyak RM55 bilion sepanjang RM6 untuk pembangunan prasarana akan ditambah.

Menurutnya, bekalan tenaga, air, jalan, kawasan perindustrian yang sesuai sangat penting dan mesti dilaksanakan dengan segera.

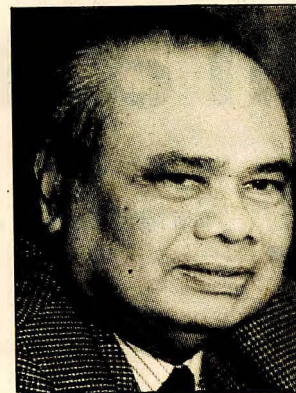
Ghafar berkata, "dengan ketiadaan prasarana yang mencukupi, usaha hendak menjadikan Malaysia negara maju tidak akan tercapai."

Dalam ucapannya, Ghafar memuji peranan media dalam membantu kerajaan membangunkan negara.

Kata beliau, sebagai media yang wujud dalam konteks masyarakat yang sedang membangun, fungsi dan tanggungjawab media di negara ini tidak sama dengan media di negara-negara maju.

Beliau menarik perhatian, keutamaan pemberitaan di negara ini tidak sama dengan di negara-negara maju kerana suasana politik, ekonomi, sosial dan budaya adalah berbeza.

Menyentuh mengenai isu raja-raja, beliau ber-



GHAFAR BABA

kata penyelesaian isu tersebut merupakan kejayaan besar kerajaan dan rakyat kerana kini rakyat dan raja-raja mempunyai kedudukan yang setaraf di sisi undang-undang.

Apa yang membanggakan, tambah beliau, isu tersebut dapat diselesaikan dengan baik tanpa campurtangan orang luar.

"Di negara lain, jika berlaku perkara seumpama itu, mungkin sudah berlaku pertumpahan da-

rah dan pemberontakan, katanya.

Beliau juga berkata, ke makmuran dan kekayaan di negara ini menyebabkan pendatang asing berduyun-duyun memasuki negara ini dengan apa cara sekalipun.

Beliau mendedahkan ada yang masuk ke negara ini sebagai pelancong atau untuk mencari kerja, tetapi akhirnya 'tersadai' menjadi peminta sedekah di kaki-kaki lima.

MOBIL yang menyambut ulangtahun ke-100 malam ini turut menyambut harijadi Ghafar yang ke-68 dengan upacara memotong kek dan nyayian beramai-ramai oleh kira-kira 300 wartawan.

Pengarah Urusan MOBIL Malaysia, John E. Pototsky dan Pengurus Besarnya bagi kawasan Rantau Asia Pasifik George M. Good turut hadir pada majlis tersebut.

15 FEB 1993
um

Ani: Help Tenaga conserve energy

KUALA LUMPUR, Sun. — Power cuts can be averted despite the current energy crisis if consumers use electricity prudently, Tenaga Nasional Berhad executive chairman Tan Sri Dr Ani Arope said.

He said the relatively low power shortage of five per cent meant disruptions in electricity supply could still be overcome. "If everyone co-operates by conserving electricity, there will be no load shedding as the shortage is actually not acute," he told the *New Straits Times* last night.

Met at the Tenaga Nasional Quran Recital Competition in Bangsar, Ani expressed the hope that all sectors would contribute towards conserving electricity to avoid difficulties.

"One could, for example,

use only half the normal lighting," he said, adding that he had started conserving electricity in his own office to set a good example.

Ani had said on Feb 10 that the power crisis was expected to continue for at least another year, saying that demand during peak hours exceeded supply by 365 megawatts.

On the call by the Federation of Malaysian Manufacturers (FMM) yesterday for Tenaga Nasional to enhance its efficiency, Ani said the long-term measures already in place would make it a more efficient utility supplier. He said the fact that Tenaga Nasional offered the cheapest electricity rates in South-East Asia was proof that it was an efficient power supplier.

Electricity rates in the

15 FEB 1993 NST
country average at 18 sen per kilowatt hour. On possible rebates to those who encountered breakdowns, he said the matter was still being studied.

Ani also said Tenaga Nasional would now give advance notice of power cuts.

FMM executive director and chief executive officer Tan Keok Yin told a Press conference yesterday that there had been indiscriminate and unannounced load shedding and power interruptions over the last few months.

In Sungai Siput, Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu said Tenaga would increase its power supply to the industrial sector by 1,000mw by end of year.

He said this could be

achieved by building more gas turbines.

Tenaga would also purchase additional power supply from Thailand and Singapore to meet the nation's daily needs of 4,300mw.

He was speaking to reporters after meeting MIC Sungai Siput division leaders here yesterday.

He said Tenaga would speed up the installation of three gas turbines which could generate a total of 375mw.

An American company has agreed to install the gas turbines in six months. It is expected to submit a working paper to the ministry and Tenaga tomorrow on the cost of building the turbines.

He said the industrial sector could save by operating during non-peak hours.

Tenaga Nasional was already experiencing serious breakdown problems several months before Tan Sri Ani Arope was appointed executive chairman but he has accepted responsibility as "the cost of leadership," reports LIM HOCK CHYE.

TENAGA NASIONAL seems to have blown a major fuse, as frequent power breakdowns and interruptions to its 3.3 million consumers make a mockery of its slogan "Powering the nation's progress."

In the early years of industrialisation, the National Electricity Board (NEB) had been able to produce enough electricity to meet the needs of the manufacturing sector.

But with the emergence of several power-guzzling, heavy industrial projects, there was a surge in demand, which screwed up the board's projections.

When the NEB was corporatised as Tenaga Nasional, the problems were still there.

Tenaga's black spell became more pronounced from August, a month before Tan Sri Dr Ani Arope was appointed its executive chairman (Sept 1) on a full-time basis by the Finance Ministry.

The Sept 29 blackout — which Energy, Telecommunications and Post Minister Datuk Seri S. Samy Vellu described as "an act of God" — burnt a hole in the coffers of:

- Tenaga, which suffered some RM6 million in lost electricity sales;

- 196 firms or 17 per cent of the Federation of

Malaysian Manufacturers members, whose losses were estimated at a conservative RM50.3 million and;

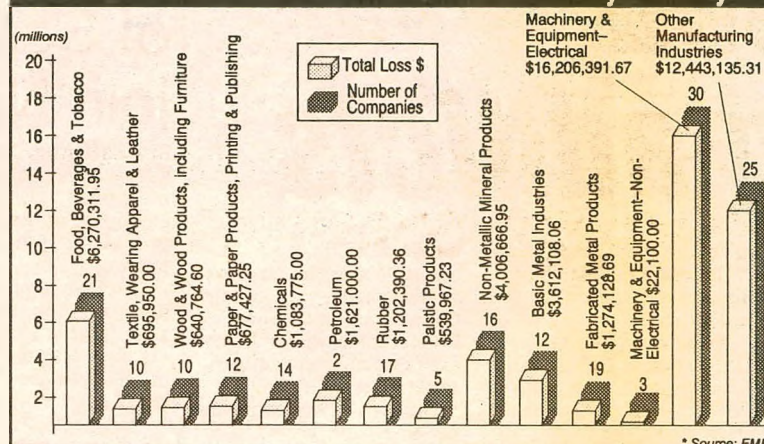
- The KL Stock Exchange, which lost RM17.2 million when trading was suspended.

Ani, formerly the chief executive officer of Kum-pulan Guthrie, admits that the country is now facing a national crisis and the occasional interruptions will be on for the next 12 months.

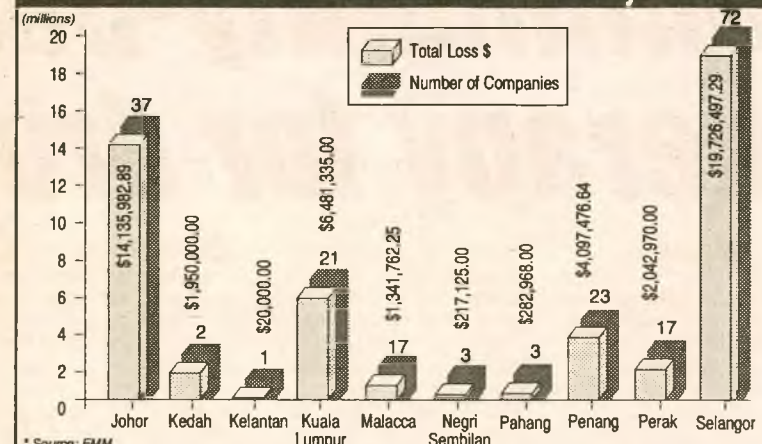
Overcoming the current crisis is doubly important — to prevent losses to industries and to protect the image of a major listed company.

There is no doubt Tenaga shares will be affected if its measures to tackle the current crisis fail.

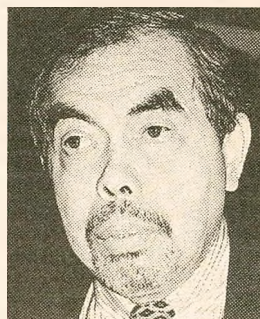
Financial Losses due to Power Breakdown by Industry



Financial Losses due to Power Breakdown by State



Seeking to end current crisis



Ani ... accountability is his style

In the intermediate to long term, Tenaga will set up more power plants and towards this end, has awarded contracts worth millions of ringgit so far this year.

Tenaga's power supply plan was based on historical growth and the upsurge in demand arising from the country's industrial development was unprecedented.

Informed sources said long before the September blackout, senior district managers were already warning Tenaga headquarters there would be a supply problem and action had to be taken to solve it.

The district managers were worried about the sudden demand for power by heavy industrial users.

Another concern was the relocation of industries from Singapore to Johor following the republic's decision to concentrate on high-tech activities.

The delay in buying turbines further compounded the problem.

Although Tenaga has been corporatised, it cannot make independent decisions in buying equipment costing more than RM15 million.

On top of bureaucratic constraints, the Tenaga board was being lulled by reports that "things on the ground" were fine and there was no cause for alarm.

As the man running the show, Ani has borne the brunt of criticisms from various quarters when

the power interruptions became too frequent.

One of the measures taken by Tenaga is the arrangement to buy electricity generated by independent power producers (IPPs), whose operations are encouraged by the Government as part of its policy to promote competition in the electricity generation sector.

However, Tenaga has to study closely the pricing to ensure consumers will not suffer for at present, Tenaga's margin is "very negligible."

But what is important at this juncture is that confidence in Tenaga must be restored.

There is no other way out for Ani except to ride out the crisis with the co-operation of all.

The FMM has pledged to co-operate with Tenaga in overcoming the power crisis.

A joint Tenaga-FMM standing committee to ensure stable supply and resolve bottlenecks has been set up in the interest of national development.

In the light of the power crisis, allegations have surfaced that malpractices among Tenaga top management were partly responsible for the power failures.

Accountability is a buzzword with Ani's management style and his response to unwarranted allegations of this nature is: "If the chairman is found to have been taking kickbacks, he should be lynched from the nearest lamp post."

12 FEB 1993

British company clinches RM100m Tenaga contract

By KARTINI ABD. KADIR

UK-BASED NEI Reyrolle Ltd (NRL), a member of the Rolls-Royce Industrial Power Group, has recently secured a contract worth RM100 million with Tenaga Nasional for the supply of switchgear equipment to 13 power sub-stations.

The 15-month contract will include the supply of circuit breakers, disconnecting switchers, cables, as well as control and protection equipment, NRL sales and marketing director D. J. Sawyer told reporters in Kuala Lumpur yesterday.

"NRL will work together with EPE Sdn Bhd, a Malaysian company, on the 13-sub-station project, which is expected to start soon. NRL is also preparing to bid for other sub-station projects," said Sawyer.

NRL is specialised in the design, manufacture and application of switchgear

and associated equipment. It currently manufactures equipment in the range of 3.3 kv to 550 kv, which is provided as loose items of plant or fully engineered complete systems on a turnkey basis.

Sawyer is a member of the UK businessmen who are currently visiting Malaysia. The seven-member trade mission is led by Sir Derek Hornby, chairman of the British Overseas Trade Board (BOTB).

The BOTB is a body made up of prominent businessmen and officials which advises the UK Government on overseas trade and investment.

"Within the next three years, the South-East Asian region will be our first priority. Twenty-five per cent of our resources and manpower and 50 per cent of our promotion programmes are concentrated in this region.

"There are a lot of business opportunities for Ma-

laysian and UK companies to explore by means of trade, investment and joint ventures. BOTB has doubled the number of its seminar programmes and the number of interested firms has increased by 50 per cent. We have also organised 30 promotional events in the UK.

"As a feedback to our seminars and programmes, we expect to have at least 6,000 serious enquiries from the UK companies," said Hornby.

Chartered WestLB (CWB), an international merchant bank, was also represented in the delegation. CWB managing director Peter Goodwin, who is also the chairman of BOTB's Asia-Pacific Advisory Group said Malaysia is one of biggest market for CWB.

"We are interested in the country's privatization programmes and project financing," said Goodwin.



□ HORNBY ... S-E Asia to be first priority.

Another company in the mission, John Laing PLC, has an area office in Kuala Lumpur which supervises

the company's current work in Malaysia and Thailand.

"We're involved in 12 hospital projects throughout Malaysia on a joint venture basis. We are also involved in the setting up of a hotel in the Eastern Seaboard of Thailand and a hospital in Bangkok," said John Laing PLC chairman J. M. K. Laing.

The main objective of the delegation is to further enhance the participation of UK companies in Malaysia's growing economy. The group was scheduled to meet members of the Federation of Malaysian Manufacturers (FMM) International Affairs Committee yesterday, to discuss the possibilities for cooperation between Malaysian and UK companies.

The group is also scheduled to meet the director-general of Malaysian Industrial Development Authority (Mida), Datuk Sadasivan.

Using generators to beat blackouts

By
**M. Krishnamoorthy
and Mehran
Chinniah**

KUALA LUMPUR, Fri. — More manufacturers and business houses are now buying and renting standby generators to overcome the frequent interruptions in electricity supply.

A random survey with some companies showed the sale of generators has boosted the business of those selling the power machines.

To overcome blackouts, Aggreko Sdn Bhd, a major electricity generator rental company, said there was about a 100 per cent increase in rentals of generators last year as compared to the previous year.

Aggreko's marketing manager William Lim declined to say how many generators were rented out.

"Our supply of generators ranging from 30 to 2,000 Kilowatts is aimed at helping those who are experiencing blackouts and power shortages."

The rental business has resulted in a sharp rise in imports of electricity generators, too.

According to statistics, imports of generators (1.25 to 75 kilowatts) increased from 7,300 to 12,500 from 1991 to last year.

Large powered standby generators and batteries are back-ups for computer installations, systems power supply and for emergency lighting for blackouts in hotels, hospitals, factories, banks, construction sites and offices.

The average monthly power interruption in Peninsular Malaysia last year according to Tenaga Nasional's Corporate Communications manager Ibrahim Hassan was approximately

ply by Tenaga Nasional.

It loses about 70 factory working hours monthly in electricity supply and it has been furnishing Tenaga Nasional with records of the shortfall in electricity supply.

Chairman of the Malaysian-American Electronics Industry Mr Jerry Lee said installing a generator would increase the cost of operation and production.

Frequent power cuts, he said, could damage equipment like computers and robotics systems.

"If there is a sudden power failure we have no opportunity to shut down the equipment," said Lee who is also the vice-president of the American Chamber of Commerce.

President of the Malaysian Battery Manufacturers Association (MBMA) Mr Ho Fook Seng said the demand for generators had increased dramatically.

switchgear panels in the event of a breakdown.

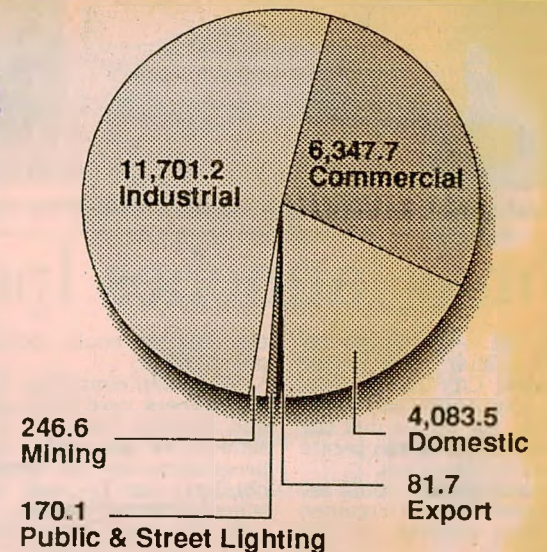
Telekom also uses generators and standby batteries on a large scale to keep the telephone exchanges powered all the time.

Mohamed Arsad Sehan, chief executive of Jaya Raya Chloride Standby Power Sdn Bhd, a major supplier of standby batteries, said the sale of standby batteries in their industry to the power generation sector increased by 50 per cent in 1992 over the past year.

Meanwhile, another supplier of generators, Tractors Malaysia Berhad which specialises on the high-end generators (250 kilowatts and above) has for about a year begun concentrating in the lower end generators (30 to 150 kilowatts).

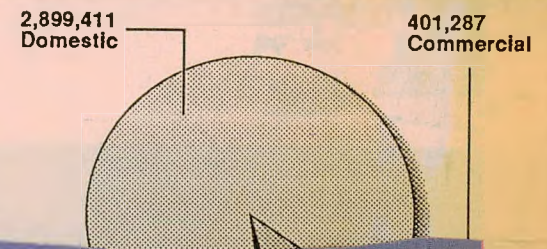
Market development executive Janice Chua said the generator market has been growing steadily since 1990.

SALE OF ELECTRICITY (GWh)*, 1992



* 1 Gigawatt hour = 1 million units

NUMBER OF CONSUMERS 1992



ANUGERAH
PELANCONGAN



Awards '92

12 FEB 1993

NATION

BUSINESS TIMES, FRIDAY, FEBRUARY 12 1993

'Production rescheduling won't solve energy crisis'

By FAUZIAH ISMAIL

THE move to have manufacturers who are operating eight hours a day to reschedule their production hours to off-peak period during the night will not solve the existing energy crisis faced by them.

It will instead result in the creation of unnecessary problems relating to workers, Malaysian Trade Union Congress (MTUC) secretary-general G. Rajasekaran said.

"It will not be smooth and simple. There will be socioeconomic problems relating to this. Female workers especially are governed by a law regarding working at night.

"Employers will also have to consider shift allowances and transport facilities for their workers. This will result in additional costs," he told Business Times.

Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu announced on Wednesday that manufacturers operating

eight hours a day have been asked to consider rescheduling their production to off-peak period. Those who do this will be offered rebates by Tenaga Nasional.

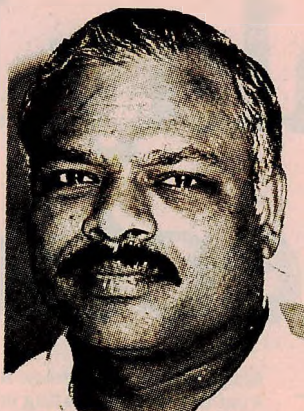
Electricity consumption at night is between 2,600MW and 2,700MW only. This is much less than the demand during the day which is 4,600MW.

He said industries working only eight hours a day can shift their operations to the night to take advantage of the 1,900MW of excess supply.

The rescheduling, Samy Vellu said, will enable Tenaga Nasional to do away with its present practice of load-shedding, which it has been compelled to undertake as a result of the power shortage.

Rajasekaran said at present, many manufacturers are already operating three shifts a day. Some are operating 24 hours. Only a handful are operating eight hours a day.

Citing an example, he said only 20 per cent of the union



□ RAJASEKARAN ... additional costs

ised metal factories in the country are operating on one shift.

"Asking these manufacturers (those operating eight hours a day) to shift their production hours will not solve the problem," he added.

Bernama reports: International Trade and Industry Minister Datuk Seri Rafidah Aziz announced yesterday the setting up of a task force

and a hotline service to monitor the frequent electricity failure which has caused massive losses to various industries.

The two services will be set up in about a week's time.

She said the hotline service will provide detailed information, including the nature of breakdown, to the industries at any time during the breakdown. She did not elaborate.

Addressing some 170 participants of a "Business Dialogue" between her and the representatives of the private sector in Johor Baru yesterday, Rafidah dismissed allegations that the Government was no longer encouraging or giving favourable treatment to local investors.

She said the Government's policy of encouraging foreign investors into the country is not to favour them. The Government favours the kinds of industry that they bring in, she added.

As such, she said, her ministry, beginning this

year, will undertake a more intensive and sensitive working programme to stimulate domestic investments in the manufacturing line.

The programme, including workshops, seminars and dialogues, will be tailored to create interest among local entrepreneurs to venture into the types of industries that have the potential and dynamism to contribute to the country's industrial developments, she added.

During the dialogue session, Rafidah ticked off the Commercial Vehicle Licensing Board for rejecting without reasons and late replies to the applications from several factories for buses and vans' licences to transport their workers.

The minister said that she could not understand why the board only issued 59 licences last year when the factories concerned needed 187 buses and vans for that purpose.

The minister pointed out that it is the Cabinet's direc-

tive that priority (in the issuance of licences) be given to the factories and not to those who want to run transport services for certain factories.

Secretary of the board Puan Faridah Hassan, who was asked to explain, said some of the applications were turned down because they did not fulfil the requirement and because the board felt that the company may not have enough capital to run its own transport services.

When told by a participant that his company, which had a paid-up capital of about RM20 million was only given five licences instead of 20 which they needed, Faridah said she needed to look at the application forms to tell why they were rejected.

When another participant complained that his company's application for a licence to carry hazardous waste was also rejected by the board, Rafidah asked Faridah whether all Cabinet directives were relayed to her office.

Give warning, Tenaga urged

By FOO YEE PING

PETALING JAYA: The Federation of Malaysian Manufacturers (FMM) has urged Tenaga Nasional to inform affected factories of impending load-shedding.

"We have been made to understand that some load-shedding is being carried out even without prior notice to the respective Tenaga branches," the FMM said in its report on major power breakdowns.

It said early warning would allow industries plan their production schedules.

The report, which in-

cludes a 10-point recommendation relating to the power disruptions, was submitted to the Energy, Telecommunications and Post Ministry recently.

"TNB, in its regular meetings with FMM, had pointed out that 80 per cent of the power failures was caused by indiscriminate digging of cables by contractors," it said.

FMM suggested that such contractors be prosecuted under Section 37(2) of the Electricity Act, 1990, where offenders could be fined a maximum of RM50,000 or three years' jail, or both.

The report said that TNB had not notified any

of such cases to the Electricity Supply Department.

It was apparent that no effective steps had been taken to resolve the problem over irresponsible contractors, it added.

The report said manufacturers lost an estimated RM50.3 million during the nationwide breakdown last September.

This was because the amount was derived from only 17 per cent (or 196 companies) of FMM member companies, which responded to its survey.

"If that is extrapolated based on the 1991 Statistics Department data on the total sales of manu-

factured products valued at RM80 billion, the estimated loss incurred for the three-day power failure could be RM219 million."

FMM also proposed that the Government provide incentives to companies which use energy-saving equipment in their plants as an encouragement for them to conserve energy.

It suggested that TNB set up a performance monitoring system whereby district managers, for example, could report the power interruptions to ensure that such disruptions did not recur.

Firms can have own supply

PENANG: Manufacturers can apply to generate power for their own use, Energy, Telecommunications and Post Minister Datuk Seri S. Samy Vellu said yesterday.

He said those with bigger generators producing excess energy could sell the power to Tenaga Nasional Bhd which, in turn, would sell it to other consumers because Tenaga was the only company licensed to sell energy.

"The ministry has also taken sufficient steps to do everything necessary to overcome the current power crisis.

"We are proposing staggered production hours to the Federation of Malaysian Manufacturers and they will be getting back to us in about 10 days time," Samy Vellu added.

He was commenting on a report yesterday which quoted International Trade and Industry

Minister Datuk Seri Rafidah Aziz as saying that the Government would privatise power stations and allow factories to set up their own generators to solve the energy crisis.

She said if Tenaga could not meet the demands of consumers, the private sector should be invited to generate power and sell it.

Samy Vellu said some firms had applied to generate their own power at the moment.

Petugas khas bekalan elektrik

12 FEB 1993

JOHOR BAHARU 11 Feb. — Kerajaan akan menubuhkan pasukan petugas khas dan perkhidmatan *Hotline* untuk mengawasi serta membaikpulih bekalan tenaga elektrik di kawasan perindustrian.

Menteri Perdagangan Antarabangsa dan Industri, Dato' Sri Rafidah Aziz berkata, langkah itu merupakan langkah jangka pendek untuk mengatasi krisis tenaga akibat keperluan mendesak sektor tersebut.

Menurutnya, pasukan tersebut yang akan ditubuhkan dalam masa sem-

bilan hari lagi dijangka dapat mengatasi masalah gangguan bekalan yang telah melibatkan kerugian berjuta ringgit kepada pekilang-pekilang.

"Talian *Hotline* akan memaklumkan kepada pekilang-pekilang mengenai maklumat terperinci kerosakan atau gangguan bekalan elektrik.

"Pasukan petugas pula mengawasi dan bertindak secepatnya untuk memastikan bekalan dapat dipulihkan pada masa yang singkat," katanya.

Rafidah berkata demikian dalam sesi dialog dengan 170 pekilang Jo-

hor dan Singapura di sini hari ini.

Beliau berkata, perseutujuan menubuhkan pasukan petugas dan perkhidmatan *Hotline* dicapai semasa pertemuan antara pegawainya dengan Menteri Tenaga, Telekom dan Pos, Dato' Sri S. Samy Vellu semalam.

Menurutnya, pasukan itu akan dianggotai oleh pelbagai badan yang relevan termasuk Tenaga Nasional Berhad, (TNB) akan beroperasi di seluruh negeri.

Rafidah sebelum ini sering menegur TNB kerana gangguan bekalan

elektrik terlalu kerap menyebabkan pengusaha industri mengalami kerugian.

Menurut Rafidah, kabinet juga telah memutuskan untuk membenarkan kilang-kilang mengendalikan sendiri jentera jana kuasa elektrik mereka.

"Dengan itu, kita mempunyai dua bekalan tenaga, TNB dan juga kilang berkenaan," jelasnya.

Beliau menambah, TNB dan agensi-agensi kerajaan yang terlibat perlu memahami keperluan sektor industri.

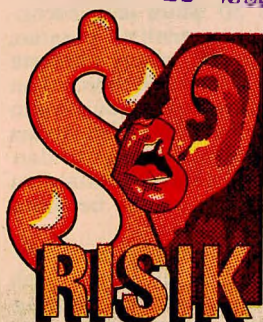
TNB tubuh anak syarikat

172 FEB 1993

TENAGA Nasional Bhd (TNB), maju setapak lagi berikutan cadangan untuk menubuhkan sebuah anak syarikat bagi mengendalikan program pembangunan pembekalnya.

Risik difahamkan TNB akan menggunakan tenaga pakar sedia ada di bahagian penyelidikan dan pembangunannya (R&D) untuk melaksanakan program berkenaan.

Bahagian R&D itu akan dijadikan syarikat sendirian berhad, mungkin sudah diluluskan pun, bagi memastikan program pembangunan pembekal TNB itu berjaya. *Risik* percaya, dengan menggu-



nakan kakitangan R&D yang arif mengenai teknologi baru dan futuristik, ramai usahawan terutama

industri kecil dan sederhana (IKS) akan menerima kesan langsung daripada usaha itu.

Antara projek yang dijangka memberi faedah besar program berkenaan ialah rancangan pengeluaran, pembekalan dan pemasangan alat elektronik - *ballast* - bagi menjimatkan tenaga elektrik. Program penjimatan tenaga elektrik dengan menggunakan teknologi ini di bangunan milik TNB membabitkan perbelanjaan bernilai RM400,000.

Difahamkan, TNB bersedia berkongsi faedah program di bangunannya

itu. Bagaimanapun, ini tidak termasuk projek penjimatan tenaga kebangsaan.

Risik mendapat tahu, R&D TNB sebenarnya mempunyai kepakaran ini dan bersedia memindahkannya menerusi latihan dan bimbingan. Ini termasuk kepakaran perundingan dan pemasangan *ballast*.

Sebagai permulaan, program penjimatan tenaga di bangunan miliknya akan dijadikan skim latihan berkenaan. Malah, TNB pada dasarnya bersedia memberi bantuan kewangan untuk tujuan ini.

Manufacturers against shift plan

12 FEB 1993

By
**M. Krishnamoorthy
and S. Kumaraguru**

KUALA LUMPUR, Thurs. — Malaysian manufacturers feel that rescheduling operations to conserve energy will cause innumerable problems to workers who will face drastic changes in their lifestyles.

Some worry that their workers, most of whom are women, will be forced to quit if operations are switched to night while others are concerned over the high rates of payment for night shifts.

But one company in Johor Baru has developed a two-pronged strategy to beat the power crisis in the State.

They were commenting on the call yesterday by Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu to factories to consider switching the eight-hour shift from the peak hours of 9am to 5pm to night.

In Penang, Federation of Malaysian Manufacturers (FMM) northern region chairman O.K. Lee felt that switching operations would give a "cultural shock" to workers, most of whom were female production operators, and lead to higher operating costs.

"We can foresee loads of problems involved in such a move and it may also result in many employees leaving

our companies," he said.

While unable to provide a list of factories engaged in one or two-shift operations, he cited sectors like the textile industry and non-processing industries as those likely to be affected by the suggestion.

In Ipoh, the Federation of Malaysian Manufacturers, Perak branch chairman Lew Chin Hoi said Tenaga Nasional Berhad should have come up with a programme on load shedding that was fair to all industries.

Such a programme would enable manufacturers to reschedule their operations to suit the power available instead of disrupting their operations, he said.

By scheduling the load shedding, Tenaga Nasional can also implement a programme for its scheduled maintenance of all their power generating units and thus enhance reliability.

The manufacturers need to be adequately compensated as such a move will result in additional cost through incentives for employees to work on Sundays or at night.

Workers will also face transportation problems and female workers might not turn up for work at night.

Tenaga Nasional should also let the manufacturers know how much power they could supply daily so that they could exercise re-

straint to reduce the power during peak hours.

Priority should also be given to those who really could not do without power supplies especially the steel and cement mills and operation theatres.

Lew suggested that incentives for working during off-peak hours (10pm to 8am) should also be available to all industries. At present, they are only available to those using high voltage.

Both parties, Tenaga Nasional and the manufacturers, have to compromise on this problem.

He described the load shedding as very disruptive as it affected company production and exports.

Meanwhile, a spokesman for the Thong Fook Plastic Industries Sdn Bhd said its two factories located in Kanthan Baru and Sungai Siput were operating 24 hours with some 300 workers daily.

He said the disruptions of power which started last year were quite common and caused the company some losses.

Mr Jerry Lee, the chairman of the Malaysian-American Electronics Industry, said although the suggestion to switch the work shift was good, it would be difficult to ask people to work the night shift.

"Such an action will affect the lifestyles of employees as they have commitments to their families.

"Only a planned and organised campaign to inform and educate the public on the critical power shortage will help in creating a better understanding among the people.

"Therefore, people will have to make sacrifices in adjusting the time in using their cookers and electrical appliances to the off-peak period," said Lee who is also the vice-president of the American Chamber of Commerce.

Mr Ting Ming Hua, a manufacturing manager of Van Leer which produces steel drums in Petaling Jaya, said that it would be difficult to switch over to night shifts for those who have been used to day shifts.

"The workers who are working the normal morning shifts will have several problems in addition to transportation problems as there are few factory buses at night.

In Johor Baru, the Federation of Malaysian Manufacturers, Johor branch, has adopted a two-pronged strategy to beat the power crisis in Johor.

It will ask members operating on single shifts to opt for night operations, while the others will be persuaded to stagger their weekend holidays to take advantage of excess power on Sundays.

FMM representative Leslie Struys said this plan was adopted at a meeting between Johor FMM officials

and Tenaga Nasional Berhad senior officers here on Tuesday.

He said the FMM would send out circulars to all its 204 members in the State to adopt and implement the strategy.

"We are working very closely with TNB to find ways to beat the present power crisis," he said at a business dialogue between International Trade and Industry Minister Datuk Seri Rafidah Aziz and the private sector in Johor Baru.

The function, attended by over 200 chief executives and captains of industry was jointly organised by the FMM Malacca and Johor branches.

Rafidah said the Johor FMM initiative was commendable and ought to be emulated by manufacturers in other States.

She said manufacturers should also find solutions to the problem rather than wait for government remedial action.

Struys, who is also general manager and director of Malaya Glass Berhad, said inadequate power and the persistent disruptions in supply were a major concern to local manufacturers.

He hoped FMM members would voluntarily agree to switch to night operations and staggered weekend holidays.

He said it was logical and feasible for manufacturers to use electricity supply at

night and on Sundays, when demand was at its lowest.

In Malacca, Likom group of computer companies executive director Elgin Wang said regular power failures could reduce the competitiveness of the affected factories.

In Seremban, checks with a number of factories here showed that they are unable to reschedule their operations as they are operating around the clock.

They said there was no way adjustments could be made to their schedules.

However, a few of them have taken the initiative to reduce their power consumption.

Motorola Semiconductor Sdn Bhd's facilities manager H.N. Lau said his factory had installed capacitors costing RM100,000 to increase the power factor and minimise electricity wastage.

Its monthly electricity bill usually came up to RM500,000 but this has been reduced by between RM20,000 and RM50,000.

Rolnic Ceramic Sdn Bhd general manager V.K. Bardhan said there was nothing much the factory could do as it was operating 24 hours a day.

"Our electricity bill comes to about RM70,000 a month," he said.

General manager of Naito Electronics, Enck Mokhtar Janit, said the Government should take responsibility

for not preparing adequate infrastructure before setting up industries.

He said two more large factories were coming up at the Tuanku Jaafar Industrial Estate and this would worsen the energy crisis.

Malaysian Trades Union Congress secretary-general G. Rajasekaran said that working on a different shift would affect people's lifestyles and workers were likely to resist dramatic changes like this.

"There will be a lot of opposition and it is not a solution to the energy crisis.

"It is not a feasible proposal as it will upset their routine like transportation and baby-sitting arrangements.

"At the same time cost of production will increase and there will not be sufficient incentives to make them work at night. For example, shift allowances in the night will be higher," added Rajasekaran who is also the executive secretary of the Metal Industry Union.

The Negri Sembilan branch of the MTUC also disagreed with the proposal, saying that it would affect family life and health of the workers.

Its secretary, Mr K. Veeriah, said the MTUC was strongly against female production workers, who comprise 60 to 70 per cent of employees in the manufacturing and textile industries, working on night shifts.

Need to have balanced growth in the country

By AZAM ARIS

URBAN concentration and development in the country's key areas — Klang Valley, Johor Baru and Butterworth

"This balanced growth can reduce over-concentration and migration from rural areas. It can also result in a more optimal usage of the country's infrastruc-

Sarawak to mull Felda land request

THE Sarawak Government will consider allowing the Federal Land Development Authority (Felda) to develop land in certain areas of the state if it applied to do so.

Sarawak State Land Development Minister Datuk Celestine Ujang Jilan said yesterday that Felda did not

Kian wins

By SITI HAJJAR SULAIMAN

ALTHOUGH this man does not have paper qualifications, it did not deter him from making a name for himself and his company in Malaysia as well as abroad.

Last night, in recognition for his management skills.

Consider off-peak hours, factories told

By RODHIAH ISMAIL
and FADZIL GHAZALI

MANUFACTURERS operating only eight hours a day have been asked to consider rescheduling their production hours to off-peak periods, with Tenaga Nasional offering rebates for those agreeing to do so.

The rescheduling will enable the utility to do away with its present practice of load-shedding, which it has been compelled to undertake as a result of power shortages.

Details of the rebate offer have yet to be worked out, Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu told reporters in Kuala Lumpur yesterday after an hour-long meeting with representatives of the Federation of Malaysian Manufacturers (FMM) at which Tenaga executive chairman Tan Sri Ani Arope and other top company officials were also present.

FMM Energy and Utilities Committee chairman Mike Krishnan, responding to the proposal, said the FMM will try its utmost to cooperate with Tenaga and the ministry so that the effects of the current power situation can be greatly reduced.

"We are going to work closely with Tenaga since we have been given the assurance that this is a temporary problem which will be resolved in the next 12 months," he said.

Samy Vellu said at the meeting that a special committee to look into the interests of the manufacturers in getting sufficient power supply has been set up.

The committee, compris-

ing representatives of the FMM, Tenaga, the Electricity Supply Department, the Ministry of International Trade and Industry and Telekom Malaysia, is headed by Energy, Telecommunications and Posts Ministry Secretary-General Datuk Helmi Mohd Nor.

The FMM has agreed to provide the committee with the list of factories categorised according to their operating hours — 24 hours, 16 hours or eight hours a day.

Krishnan said the list is expected to be ready in 10 days.

"Following this, the committee will have to think of ways on how best these factories can utilise the excess capacity available at night,"

the minister said.

He explained that electricity consumption at night is between 2,600 megawatts (MW) and 2,700MW only. This is much less than the demand during the day which is 4,600MW.

He said industries working only eight hours a day can shift their operations to the night to take advantage of the 1,900MW of excess supply.

However, some industries such as the steel, aluminium and food industries which operate 24 hours a day will have to be given electricity supply around the clock, he added.

Samy Vellu said the current power shortage is due to repair work being carried

out at nine of Tenaga's turbines. "We are now short of power by 5 per cent which at the peak period amounts to 300MW." The peak period is between 10am and 5pm.

Frequent power disruptions in recent months have caused the country's manufacturers to incur heavy losses, running into millions of ringgit for some.

An FMM survey showed that the nationwide blackout on September 29 last year resulted in a RM50.2 million loss to manufacturers. Even this may not be a true figure as many industries did not report their losses.

Meanwhile, Tenaga has awarded contracts worth RM900 million to three companies for the installation

and maintenance of seven gas turbines at the two power plants being built in Malacca and Serdang.

The companies are John Brown Engineering (JBE), Marubeni Corp and Siemens. Marubeni will install and maintain two 110MW gas turbines in Malacca, while JBE will put up two more similar turbines at Serdang. Siemens will install three 315MW gas turbines at Serdang.

Tenaga's Ani said the installation of these turbines is part of Tenaga's long-term plan to overcome the country's power shortage.

"We are upgrading our power output capacity as fast as we can. The result, however, will only be seen in six to seven months," he told reporters after opening the Sultan Ahmad Shah Training Institute's 10th anniversary celebrations in Serdang yesterday.

Tenaga has also awarded contracts worth RM700 million to five contractors to supply and maintain 10 industrial turbines for the company's plants in Selangor and Johor.

Ani said the installation of the 17 gas and industrial turbines will increase Tenaga's power supply capacity by 1,000MW a day. At present, Tenaga has an installed capacity of 5,500MW a day. Due to repair work on some of the turbines, Tenaga's power generating capacity has been reduced by 1,000MW.

Ani said demand for electricity has surged very dramatically in the last two years, and this caught Tenaga offguard.



TENAGA NASIONAL ELECTRICITY SALES IN 1991

11 FEB 1993

Customer Type	Units Sold (MWH)	Value (RM'000)	Sen per unit	Number of customers
Domestic	3,661,879	780,909	21.33	2,708,890
Commercial	5,592,438	1,285,744	22.99	378,031
Industrial	9,765,887	1,374,962	14.08	8,649
Mining	301,355	37,612	12.48	168
Public Lighting	157,859	28,278	17.91	8,029
Bulk Supply to Thailand	59,052	7,706	13.05	
Total	19,538,470	3,515,211		3,103,767

Source: Electricity Supply Department

BT table

Private firms now allowed to generate and sell electricity

12 FEB 1993

By Ravi Nambiar

JOHOR BARU, Thurs. — The Government will privatise power stations and allow factories to set up their own generators to solve the present power crisis faced by the nation.

International Trade and Industry Minister Datuk Seri Rafidah Aziz said this major shift in policy meant that Tenaga Nasional Berhad would no longer enjoy a monopoly on electricity supply.

She said it was the Cabinet's view that if Tenaga could not meet the demand, the private sector should be invited to generate and sell electricity.

This means, private power stations can now be set up to sell electricity to industries, households and even to Tenaga to enhance its capacity.

Although this has been

allowed previously in remote towns, it will be done on a much bigger scale now to enable national electricity supply to be upgraded.

Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu had said in February last year that although the private sector was allowed to build power-generating stations, the distribution of electricity would remain with Tenaga.

Rafidah said factories could also apply for licences to set up generators to meet their own requirements.

"The power crisis is a priority for the Government. If Tenaga cannot meet demand, then the private sector will have to come in. TNB will have no more monopoly on electricity supply," she said at a business dialogue with the private sector here today.

More the 200 chief execu-

tives and captains of industry attended the function, organised by the Federation of Malaysian Manufacturers, Malacca and Johor branches.

Rafidah said although Tenaga was taking concerted short and long-term steps to overcome the present power crisis, there was a dire need for it to fine-tune its operations to meet the needs of the private sector.

"Tenaga cannot afford to just look at the bottom line because if the industries fail, there will be no bottom line.

"How good your bottom line is depends on how well the industry performs. TNB must take cognisance of this because it is very important," she said.

Rafidah said her ministry had also decided to set up a special task force with hotline service at national and State levels to monitor the

electricity needs of the private sector.

The task force, comprising representatives from the public and private sectors, will alert industries of power shut-downs to enable them to reschedule operations.

It will also monitor demand to facilitate load shedding in areas where demand is low so that the excess power could be diverted to more needy industrial zones.

Senior officers from the International Trade and Industry and Energy, Telecommunications and Posts ministries met yesterday in Kuala Lumpur to finalise details of the national task force, which will be formed within the next 10 days.

MANUFACTURERS AGAINST RESCHEDULING OPERATIONS: P2

Tenaga seeks public co-operation in conserving energy

Plan to minimise power cuts

By A. Rachel and
M. Krishnamoorthy

KUALA LUMPUR, Wed. — The power crisis now faced by the nation is expected to continue for at least another year.

The disruptions in electricity supply can only be overcome when long-term measures like upgrading Tenaga Nasional Bhd's power stations are completed.

As a short-term measure, however, efforts are under way to get manufacturers to reschedule their operations and the public to conserve energy during peak hours.

TNB executive chairman Tan Sri Dr Ani Arope said today Tenaga was doing everything and looking at all possible options to minimise the disruptions in power supply.

He, however, said this could only be done with the help of the public.

"The matter is no longer a Tenaga problem alone. It is a crisis. It is a national problem. The situation is bad but not uncontrollable. The public must understand it is a tough situation."

He was speaking to reporters after the launch of the 10th anniversary celebrations of the Sultan Ahmad Shah Training Institute in Bangi, Selangor.

The demand for electricity is now about 365 megawatts more than what Tenaga can supply during peak hours.

Ani said although technically Tenaga had sufficient capacity to meet the demands of the nation, the scheduled and unscheduled maintenance works on the turbines had caused acute shortages of electricity during peak hours.

In addition, the upsurge in demand for electricity, especially during the peak hours had further aggravated the situation.

TNB has the capacity to supply 5,500 megawatts of electricity per day.

"Most of our plants, however, are more than eight years old and therefore we have to have more frequent maintenance of the turbines," he said.

He said at any one time, turbines supplying more than 1,000 megawatts were shut down for scheduled and unscheduled maintenance works.

The scheduled maintenance cannot be postponed as it may cause more serious problems later.

During peak hours between 12 noon and 4pm to 5pm, the demand can also rise to more than 4,500 megawatts.

At night, the demand usually drops by half to about 2,500 megawatts.

When asked why the maintenance could not be scheduled in such a manner as not to affect the overall supply of electricity, he said: "When one is undergoing maintenance, another trips and we have to shut it down."

In a bid to reduce the demand during the peak hours, Ani will be meeting Federation of Malaysian Manufacturers (FMM) officials to discuss the possibility of re-scheduling their operations.

In turn, TNB is willing to offer rebates to companies which reschedule their demands and operate at off peak periods.

In addition, the agreement with Thailand and Singapore to supply excess electricity to one another is also expected to help ease the country's shortage.

However, the electricity interconnection with Singapore, which is no longer working following the massive blackouts in Malaysia

□ PLEASE TURN TO
PAGE 2, COL 6

Earliest turbine to come onstream in six months

□ FROM PAGE ONE

and the republic last year, will only be back in operation next month.

He said TNB had already undertaken long term measures to overcome the problem, with the award of RM1.6 billion contracts for 17 turbines which would produce a total of about 1,000 megawatts.

The earliest turbine is expected to come onstream in about six to seven months.

He urged the public to refrain from using electrical items like the iron during the peak hours and to conserve electricity.

Meanwhile, Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu said a special committee on energy supply had been established to try and get the daytime eight-hour shift factories which operate during the peak hours to switch their operations to the night.

He said that there was excess of 1,400 megawatts in the night and the fac-

ories which have a shorter operation time should co-operate and work during low peak periods in the night.

"Those factories operating 16 hours should also consider operating more during the night," he said after meeting representatives of the Federation of Malaysian Manufacturers at his office this evening.

He has requested the federation to ask its 1,160 members to provide a schedule of their operation time.

The committee, which will also study the different operation times of factories, is chaired by ministry secretary-general Datuk Mohamed Helmi Mohamed Nor. Its members are officials from Tenaga, Telekom Malaysia, International Trade Division of the Ministry of International Trade and Industry and the FMM.

"Vital industries like steel and food, which operate 24 hours a day, will be allowed to operate both day and night."

"We want those operating

their factories for between eight and 16 hours to operate during the night because it will avoid cuts in power supply (load shedding)," Samy Vellu added.

He assured the manufacturers that the shortage of power supply would be resolved in 12 months.

"TNB will consider giving a rebate to those who have experienced power breakdowns if their requests are justified."

"I wish to apologise to Malaysians for the short supply of electricity as we are at the threshold of a power crisis."

The federation's sub-committee chairman on energy and utilities, Mr Mike Krishnan, said they were pleased with meeting the minister and his officials.

"We will work closely with Tenaga and the ministry in overcoming the problems of electricity supply."

"The federation urges non-members who run their factories for eight hours to co-operate with the Government by operating during non-peak hours," he added.

NO QUICK END TO BLACKOUTS

11 FEB 1993

By FOO YEE PING and
AHMAD ZUBER IBRAHIM

BANGI: Malaysians will have to live with power failures for at least another year.

Describing the current crisis as a "national problem," Tenaga Nasional Berhad executive chairman Tan Sri Dr Ani Arope appealed to the public yesterday to help conserve electricity.

"We may offer manufacturers rebates to encourage them to reschedule their operations to off-peak hours," he said.

The situation now was bad but not uncontrollable, he said after launching the

10th anniversary celebrations of the Sultan Ahmad Shah Training Institute.

One cause of the problem was the schedule of maintenance on turbines.

Dr Ani said the spate of interruptions would persist for another year until all the scheduled maintenance work had been carried out and when more power would come onstream.

"As for long-term measures, we are awarding contracts for more turbines which could see about 1,000 megawatts coming onstream," he said.

However, that could be possible only in another seven months at the earliest.

Dr Ani said the power-sharing deal with

Singapore would be resumed, with each undertaking to sell surplus power.

It is understood TNB would continue to carry out load shedding whenever electricity supply could not meet demand.

Factories affected would be given 30 minutes notice.

Meanwhile, Energy, Telecommunications and Post Minister Datuk Seri S. Samy Vellu said the Government was pulling out all stops to prevent it from worsening.

The country was experiencing a five per cent power shortage or 300 megawatts at peak hours between 10am and 4pm daily, he said after meeting Federation of Malaysian Manufacturers representatives.

Cadangan atasi kurang tenaga

KUALA LUMPUR 10 Feb. — Menteri Tenaga, Telekom dan Pos, Dato' Sri S. Samy Vellu hari ini mencadangkan kilang-kilang yang beroperasi selama lapan jam sehari supaya menukarkannya ke sebelah malam bagi mengatasi masalah kekurangan tenaga elektrik.

Beliau berkata, langkah itu akan dapat membantu Tenaga Nasional Berhad (TNB) membekalkan tenaga elektrik kepada sektor perindustrian tanpa gangguan sebagaimana dihadapi sekarang.

Bercakap kepada para pemberita selepas mengadakan perbincangan dengan Persatuan Pengilang-Pengilang Malaysia (FMM) di pejabatnya di sini hari ini, Samy Vellu memberitahu, beliau telah meminta kerjasama persatuan tersebut melaksanakan cadangan itu bagi mengatasi masalah berkenaan.

Perbincangan yang pertama di antara Kementerian Tenaga, Telekom dan

Pos dan FMM sejak timbulnya krisis tenaga itu telah berlangsung kira-kira satu setengah jam.

Turut hadir ialah Pengerusi Eksekutif TNB, Tan Sri Ani Arope.

FMM yang diketuai oleh Pengerusi Jawatankuasa Penggunaan Elektrik, Mike Krishnan. Persatuan tersebut dianggotai oleh 1,160 pengilang dari seluruh negara.

Menurut Samy Vellu, kilang-kilang di negara ini dibahagikan kepada tiga kategori iaitu yang beroperasi selama 24, 16 dan lapan jam.

Katanya, sebuah Jawatankuasa Khas juga telah ditubuhkan berikutan perbincangan itu bagi menyelesaikan masalah tersebut bagi tempoh 12 bulan akan datang.

Jawatankuasa tersebut akan dianggotai oleh wakil-wakil daripada TNB, FMM, Jabatan Tenaga Elektrik, Kementerian Perdagangan Antarabangsa dan Industri dan Sistem Telekom Malaysia.

"Jawatankuasa itu akan mengkaji cara-cara bagaimana untuk membekalkan tenaga elektrik tanpa sebarang gangguan kepada sektor perindustrian," katanya.

Ketua Setiausaha Kementerian Tenaga, Telekom dan Pos, Dato' Mohd. Nor akan mengetuai jawatankuasa itu.

Masalah

FMM juga, kata beliau, telah diminta supaya menyenaraikan kategori kilang-kilang kepada Kementerian Tenaga, Telekom dan Pos dalam tempoh 10 hari bagi tujuan tersebut.

Tambah beliau, TNB kini menghadapi masalah kekurangan bekalan elektrik sebanyak 365 megawatt (MW) akibat permintaan tinggi daripada sektor perindustrian yang berkembang pesat.

Penggunaan elektrik adalah tinggi antara pukul 10 pagi hingga 4 petang.

Menurutnya lagi, permintaan tenaga elektrik

semasa ialah 4,600 MW pada satu-satu masa sedangkan kapasiti maksimum semua janakuasa hanyalah 4,300 MW.

Mengenai kerugian yang dialami oleh beberapa kilang ekoran terputusnya bekalan elektrik baru-baru ini, Samy Vellu memberitahu, TNB akan memberi rebat dalam bentuk penggunaan elektrik kepada kilang-kilang berkenaan.

"TNB tidak akan membayar pampasan tetapi akan memberi rebat dalam bentuk tenaga elektrik," katanya.

Sementara itu, Ani Arope ketika bercakap kepada para pemberita selepas merasmikan majlis sambutan ulang tahun ke-10 Institut Latihan Sultan Ahmad Shah (ILSAS) di Bangi, hari ini berkata, TNB telah mengatur pelbagai rancangan termasuk projek mempertingkatkan keupayaan bekalan elektrik di beberapa stesen janakuasa di seluruh negara.

Cara atasi krisis tenaga

1993

KUALA LUMPUR, Rabu — Kerajaan meminta pengusaha kilang yang beroperasi lapan jam sehari pada waktu siang mengubah jadual kerja kepada malam bagi membantu menghadapi krisis kekurangan tenaga di negara ini sekarang.

Menteri Tenaga, Telekom dan Pos, Datuk Seri S Samy Vellu, berkata pengubahsuaian jadual itu perlu kerana pada siang hari penggunaan bekalan tinggi dan boleh menyebabkan gangguan serta berkurangan sehingga 300 megawatt.

"Kita minta kerjasama pengusaha kilang supaya dapat menukar waktu bekerja kepada malam supaya tugas mereka boleh dijalankan dengan licin tanpa gangguan tenaga.

"Setiap hari, kita men-

janakuasa lebih 4,300 megawatt dan pada waktu sibuk iaitu jam 10 pagi hingga 5 petang permintaan meningkat hingga 300 megawatt lagi," katanya.

Beliau berkata demikian kepada pemberita selepas mengadakan perjumpaan dengan dengan Persekutuan Pekilang-Pekilang Malaysia (FMM), di pejabatnya, hari ini untuk menjelaskan mengenai masalah kekurangan pembekalan tenaga.

Samy Vellu berkata, cadangan itu adalah antara lain yang dibincangkan dengan persatuan itu bagi mencari jalan menjimatkan penggunaan tenaga sekarang.

Bagaimanapun, katanya, kerajaan memberi jaminan masalah kekurangan tenaga dapat

diselesaikan dalam tempoh setahun.

"Masalah kekurangan tenaga kini sudah menghampiri tahap serius.

"Kerajaan minta maaf kepada orang ramai dan pengusaha kilang mengenai keadaan ini," katanya.

Menurutnya, kerajaan bercadang membayar ganti rugi sehingga 10 peratus kepada pengusaha kilang yang mengalami kerugian kerana gangguan elektrik.

Sehubungan dengan itu, kementerian menuhkan jawatankuasa khas untuk mengawasi krisis berkenaan yang dipengerusikan oleh Ketua Setiausaha Kementerian, Datuk Helmi Mohd Nor.

Jawatankuasa itu turut diwakili oleh Jabatan Be-

kalan Elektrik, Kementerian Perdagangan Antarabangsa dan Industri, Telekom Malaysia Berhad dan Persatuan Pekilang-Pekilang Malaysia.

Samy Vellu berkata, FMM juga akan berbincang kedudukan kilang yang beroperasi 16 dan 24 jam sehari dalam usaha membantu kerajaan menjimat tenaga.

"Tiga kategori kilang akan diputuskan oleh FMM yang dianggotai 1,160 ahli," katanya.

Sementara itu, Pengerusi Jawatankuasa Tenaga dan Kemudahan Awam FMM, Mike Krishnan, berkata mereka akan menyiapkan laporan mengenai kilang yang beroperasi lapan, 16 dan 24 jam sehari, selewat-lewatnya dalam tempoh 10 hari.

TNB jamin gangguan 11 FEB 1993 tidak berulang

SAYA merujuk kepada aduan mengenai 'Penduduk gelisah elektrik kerap terganggu,' di daerah Besut, Terengganu (Berita Harian, 29 Disember 1992).

Adalah dimaklumkan bahawa pada 11 Disember 1992, jam 1.00 tengah hari bekalan elektrik ke kawasan Ulu Besut telah terputus disebabkan kerosakan kabel bawah tanah 11 kV di Kampung Bukit Payong yang membabitkan bekalan terputus di lima buah kampung.

Bekalan elektrik dapat dipulihkan semula pada 15 Disember 1992 jam 5.00 pagi. Kelewatan pe-

mulihan bekalan elektrik disebabkan ada empat kerosakan kabel di tempat yang berasingan.

Pihak Tenaga Nasional Berhad sedang membuat perancangan bagi memperkukuhkan sistem bekalan elektrik di kawasan itu supaya kerosakan seperti ini tidak berulang lagi di masa-masa akan datang.

Segala kesulitan tidak disengajakan.

**YAHYA KHATIB
MOHAMAD,
Pegawai Pentadbir
Wilayah
b.p. Pengurus
Wilayah (Timur)**

CURRENTLY, very few private corporations are directly involved in manpower training, much less re-training, although a few do provide incentives to their employees to upgrade their skills.

The kind of linkage between industry and the national educational system prevalent in developed economies is therefore missing.

However, failure of the public institutions to cope with the demands of education and soaring costs in overseas tertiary education have resulted recently in the emergence of more private sector institutions to provide an alternative source of education.

An estimated 35,600 students were enrolled in such institutions in 1990 with 14 per cent at the degree level, 46 per cent at diploma level and 40 per cent at certificate level (6th Malaysia Plan).

But high outlay for providing technical equipment and facilities has made it difficult for most local private institutions to conduct advanced

The industrial and vocational training system in Malaysia

10 FEB 1993

training in strategic technologies, with a resultant preponderance of local colleges offering courses in conventional areas like accounting, law, business management and, more recently, basic computer application.

Such a situation has given rise to a very low technical/science orientation in the Malaysian education system.

In fact, a comparative study of the Malaysian education system with other countries has revealed that technical-orientation of the Malaysian education falls not just behind the NICs like Singapore but even other developing countries.

Only 30 per cent of all tertiary students in Malaysia are in the technical fields compared with 60 per cent in Singapore, 42 per

cent in Brazil and 48 per cent in Mexico.

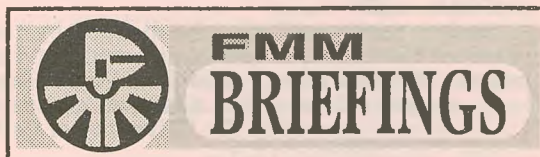
It is not known exactly how the enrolment pattern is for Malaysian students abroad.

According to numerous case studies on the government-bonded scholarship scheme, there is little indication that government funding agencies have tied their overseas scholarship scheme with manpower needs to give them a technical bias.

The quantum of private Malaysian students enrolled in technical and scientific courses overseas may be somewhat higher but probably only a small minority among graduates in advanced technologies like telecommunications, micro-electronics, and bio-technology return to work in Malaysia.

At the same time there is an outflow of the existing crop of such talent from the country to the Organi-

THE decade of the Nineties ushers in a new era of intense competition in the international market as a result of increasing consumer awareness and demand for quality products, business globalisation around the world, emerging regional groupings and opening up of new markets. In order to achieve and keep the competitive edge, the most important infrastructure any nation should now have is a consistently high quality, skilled and versatile human resource base. Last week, we looked at the global trends in industrialisation and its implications on Malaysia's industrialisation drive and its human resources. Part Two of the article today discusses the private sector role in training.



sation for Economic Cooperation and Development (OECD) countries and the NICs, in particular Singapore.

Apart from numbers, there is the question of quality of training.

A major problem of the current industrial and vocational training system in the country is that they are not fully able to meet the demands of the industry due either to their inability to cope with the rapid changes of industrial technologies and the industrial structure of the economy, or lack of effective planning and development of vocational and training programmes.

It is known, for example, that existing training institutions in the country, especially vocational schools, offer very little practical content in their

Assuming that the same number will be graduating from foreign institutions and local private colleges, this will add another 64,320 engineers to the existing pool of 20,166 giving a total of 84,486 engineers in an estimated population of 36.6 million by 2020.

A quick calculation shows a ratio of 2,308 engineers per million population, which will still be low considering that Singapore had 14,303 engineers and scientists per million population in 1980 and Hong Kong 26,458.7 per million population in 1986 (Table 1).

It is difficult to estimate the exact number of technicians in the country but according to the Industrial Master Plan (IMP) (1985-95), Malaysia had a ratio of 515.6 technicians per million population in 1985, which compared miserably

over the years (from 104,128 in 1976 to 145,711 in 1987), the relative percentage of skilled to unskilled production workers has declined over the years (from 43.1 per cent in 1976 to 39.9 per cent in 1987), indicating the inadequacy of the training system to meet the growing need for skilled manpower.

● **Facing the future:** key strategies to meet the human resource gap: The above analysis has demonstrated an insufficient stock of skills, especially of the scientific and engineering type to permit large scale domestic development of technological ability.

In fact, Malaysia's current level of industrialisation suggests a demand for skills at a level that exceeds what domestic technological capability can meet — a shortfall

Ministry studying 'power generating barge' idea

By RODHIAH ISMAIL

THE Energy, Telecommunications and Posts Ministry is looking into the possibility of leasing an electricity generating barge (a floating power generator), in its search for an alternative back-up to supply the national grid in times of power shortage.

The system, currently used in the UK, Japan and the Philippines, will enable Tenaga Nasional to provide continuous electricity supply should there be a shortage in capacity.

Energy, Telecommuni-

cations and Posts, Minister Datuk Seri S. Samy Vellu said Malaysia is looking at the UK and Japan for more information on the system and possible hiring of a barge, from which about 300 megawatts (MW) of electricity may be sourced.

"I have contacted the British High Commissioner in Kuala Lumpur myself to convey our interest to hire a barge to the relevant British companies in the UK," Samy Vellu said.

He said he discussed the idea in Kuala Lumpur yesterday with members of the newly-established en-

ergy crisis management team headed by Tenaga executive chairman Tan Sri Ani Arope.

Speaking to reporters in Kuala Lumpur after a meeting with representatives of courier firms yesterday, Samy Vellu said the crisis management team will meet members of the Federation of Malaysian Manufacturers tomorrow to present several proposals on curbing the effects of the current power crisis. Details of the proposals were not disclosed.

The minister said the power shortage hitting

Peninsular Malaysia at present is expected to end in the next nine months once all the nine turbines under repair resume operation. The turbines are capable of producing a total of 787MW of electricity.

So far, three of the turbines have been repaired, returning some 240MW of electricity to the system, he said.

Samy Vellu said Malaysia plans to source additional electricity supply from Singapore and Thailand, totalling 400MW, for one year in a move to overcome the present power

situation.

Other than that, the Government is looking into the possibility of Tenaga purchasing excess electricity generated by large companies with private generators, he said.

He urged companies to use air-conditioners equipped with a timer to promote greater energy-savings.

The public are also reminded to save energy, at least for over the next nine months until the power shortage problem is fully resolved, he added.

□ SEE ALSO PAGE 20

10 FEB 1993

Muka 9

Bekalan elektrik, air dipertingkatkan

KUALA LUMPUR, Selasa — Kerajaan akan memastikan bekalan elektrik dan air serta perhubungan di negara ini dipertingkatkan segera bagi memastikan pertumbuhan pesat sektor perindustrian tidak terjejas, kata Timbalan Perdana Menteri, Ghafar Baba.

Menurutnya, kerajaan menyedari pentingnya keperluan itu dan mengarahkan Kementerian Perdagangan Antarabangsa dan Industri membuat kajian.

"Kabinet menerima laporan lengkap mengenai usaha yang perlu diambil bagi mengatasi masalah berlakunya gangguan elektrik dan air sejak kebelakangan ini," katanya.

Beliau berkata demikian ketika ditemui di Pangkalan Tentera Udara Diraja Malaysia (TUDM) Sungai Besi, hari ini. Ghafar menaiki pesawat Piaggio Avanti P180 dan meninjau ruang udara sekitar Kuala Lumpur selama kira-kira 30 minit.

Sementara itu, Menteri Perdagangan Antara-

bangsa dan Industri, Datuk Seri Rafidah Aziz, ketika ditemui berkata, pembangunan perindustrian akan datang dirancang dalam tempoh lebih panjang berbanding lima tahun sekarang bagi memastikan pertumbuhan sektor itu tidak terjejas kerana kekurangan kemudahan infrastruktur.

Menurutnya, kajian itu termasuk menyediakan dokumen dan strategi pembangunan perindustrian yang terperinci ke arah tahun 2020.

Katanya, kajian semula itu wajar kerana pelan induk perindustrian lima tahun yang dilaksanakan selama ini tidak sesuai lagi kerana pelbagai perkembangan berlaku dalam sektor itu, tidak dapat ditampung oleh infrastruktur sekarang terutamanya penyediaan bekalan tenaga.

Rafidah berkata, kajian semula itu perlu bagi membolehkan kerajaan menyediakan pelbagai kemudahan infrastruktur termasuk jalan, bekalan elektrik, air, perhubun-

gan dan pelabuhan kerana tanpa perancangan jangka panjang akan menjejaskan pertumbuhan perindustrian.

Menurutnya, kajian itu juga bertujuan memastikan pelabur terbabit yakin kepentingan mereka tidak terjejas akibat gangguan bekalan elektrik dan air seperti yang berlaku sejak kebelakangan ini.

"Saya mengarahkan pegawai yang terbabit dalam perancangan menyiapkan rancangan perindustrian itu sebelum akhir tahun ini.

"Pegawai berkenaan juga diminta mengadakan perbincangan dengan sektor swasta dan agensi terbabit untuk mendapatkan maklum balas bagi menayakan usaha itu," katanya.

Beliau berkata demikian ketika diminta mengulas kenyataan Menteri Tenaga, Telekom dan Pos, Datuk Seri S Samy Vellu, bahawa Malaysia menghadapi masalah kekurangan bekalan elektrik yang disifatkan sebagai membimbangkan.

Tenaga: Langkah segera diambil

10 FEB 1993

KUALA LUMPUR 9 Feb. — Timbalan Perdana Menteri, Ghafar Baba berkata, kerajaan akan melakukan tindakan segera untuk mengatasi krisis tenaga yang melanda negara sekarang.

Katanya, tindakan itu ialah menambah jumlah megawatt (MW) kuasa elektrik di semua stesen janakuasa.

"Kabinet telahpun menerima kertas kerja mengenai perancangan yang perlu dilakukan bagi menghadapi krisis tersebut dan kita sedang mengatasinya dengan segera," kata Ghafar kepada pemberita selepas menyaksikan demonstrasi pesawat buatan Itali, Piaggio Avanti P180 di



GHAFAR BABA

Stesen Tentera Udara Diraja Malaysia (TUDM), Sungai Besi, di sini, hari ini.

Beliau berkata, peranc-

cangan strategik perlu dilakukan bagi mengatasi masalah itu untuk memastikan lebih banyak pelabur dari luar negara terus datang ke negara ini.

"Kerajaan faham jika tidak cukup tenaga, pelabur tidak akan datang, oleh itu, kita harus menambah tenaga yang ada kerana ia adalah sebahagian daripada infrastruktur," kata Ghafar.

Kepada satu soalan, Ghafar berkata, beliau tidak fikir bekalan tenaga elektrik yang dihasilkan sekarang tersekat berikutan pertumbuhan mendadak sektor perindustrian.

"Kita masih mempunyai banyak tenaga yang boleh menampung keku-

rangan yang berlaku tetapi apa yang diperlukan sekarang adalah persediaan untuk masa depan," katanya.

Semalam, Menteri Tenaga, Telekom dan Pos, Dato' Sri S. Samy Vellu memberitahu bahawa Malaysia sedang menghadapi krisis tenaga yang paling buruk dalam sejarah akibat keperluan mendesak sektor industri yang berkembang begitu pesat.

Menurut Samy, krisis tenaga dalam bentuk gangguan dan kekurangan tenaga elektrik itu akan lebih teruk Mac ini dan ia akan berterusan sehingga sembilan bulan akan datang.

trial trends and technological changes: Continuous monitoring of the industrial trends and technological changes and their implications on manpower requirements is vital for effective manpower planning to close the gap between the demand and supply of skilled labour.

In this regard, the following needs to be instituted:

Strengthening the national manpower planning system under the supervision of the Ministry of Human Resources and involving all the other relevant government agencies.

Developing a well-integrated information network that provides adequate up-to-date and easily accessible information on technological/industrial trends as well as labour market conditions (supply/demand of labour and wage levels) in the country. This will require some public investment in building up of computer-based data bank.

The quality and effectiveness of future Malaysian manpower policies will depend on the accuracy and adequacy of the information inputs in the formulation of these policies.

In this regard, the

Statistics Department should play an important and central role in establishing and maintaining this statistical base.

Establishing a regular feedback mechanism between the government and the private sector to ensure the effectiveness and success of the information network.

Expansion of education and training opportunities: In order to ensure greater access to education and training at secondary and tertiary levels, especially in technical and vocational disciplines, the following steps are necessary:

Besides setting up more public technical and vocational schools which are still inadequate to meet demands, encouragement should be given to private colleges to expand their capacity by providing incentives and greater recognition of the qualifications of their graduates.

The incentives could be in the form of tax allowance for investments on equipment, accelerated depreciation on building, tax-exempt income for a certain period on profits derived from courses that are engineering or science-based.

The implementation of the open university concept to provide the much-needed tertiary education, especially in the technical and engineering discipline should be pursued more aggressively to ensure that a larger number of Malaysians including the adult working population who are interested in continuing education while working are given the opportunity to further their studies.

The current university system is no longer able to meet the increasing demand for tertiary education.

Therefore, many Malaysian students have to go overseas for their tertiary education.

Each year, the number of Malaysians seeking further education in universities is about 30,000, of whom only about 10,000 or one-third could be absorbed by local public universities.

The remaining 20,000 would have to pursue their graduate studies overseas.

The number of Malaysians studying overseas is estimated to be around 50,000 to 60,000 (Table 3).

While some of these students are on government scholarships, the majority of them are privately funded.

Table 1: NUMBER OF SCIENTISTS & ENGINEERS IN SELECTED COUNTRIES

	YEAR	SCIENTISTS & ENGINEERS		TECHNICIANS	
		NO ('000)	Per million Population	NO ('000)	Per million Population
S. Korea	1986	361.3	8,706.0	n.a.	n.a.
Singapore	1980	38.3	14,303.6	25.9	10,368.0
Hong Kong	1986	145.5	26,458.7	1,025.0	186,371.3
Malaysia	1982	26.0	1,793.1	n.a.	n.a.
Thailand	1975	20.3	471.8	47.3	1,101.0
Brazil	1980	1,352.2	11,389.7	3,074.4	25,705.3
Mexico	1970	565.6	10,720.0	n.a.	n.a.
Kenya	1982	16.2	897.3	46.0	2,539.6

Source: Sanjaya Lall, "Building Industrial Competitiveness in Developing Countries," OECD, PARIS, 1990

Table 2: MANUFACTURING EMPLOYMENT BY OCCUPATIONAL CATEGORY, 1976-87

CATEGORY	1976	1983	1987	ANNUAL COMPOUND RATE OF GROWTH	
				1976-83	1983-87
Professional & managerial	9,281 2.9%	20,016 4.2%	21,517 4.3%	11.60%	1.82%
Technical & supervisory	19,789 6.3%	40,261 8.4%	45,213 9.1%	10.68%	2.94%
Clerical & related	23,631 7.5%	39,655 8.3%	25,715 5.1%	7.68%	1.27%
General Workers	20,529 6.5%	27,185 5.7%	41,405 8.3%	4.09%	1.64%
Total production operators:	241,840 76.6%	352,412 73.5%	365,159 73.2%	-	-
Skilled	104,128 33.0%	141,172 29.4%	145,711 29.2%	4.44%	0.79%
Semi-Skilled	25,080 8.0%	56,444 11.8%	68,040 13.6%	12.29%	4.78%
Unskilled	112,632 35.7%	154,796 32.3%	151,408 30.3%	4.65%	-0.55%

Source: Adapted from Vijayakumari Kanapathy, "Industrial Restructuring & Its Implications for Employment, Wages and Human Resources Development", 1990

Table 3: TOTAL NUMBER OF STUDENTS STUDYING OVERSEAS

1970 (a)	24,000
1978 (a)	36,000
1980 (a)	39,908
1982 (b)	58,000
1985 (c)	63,000
1990 (d)	52,000

Source: (a) New Sunday Times, Jan 30, 1983

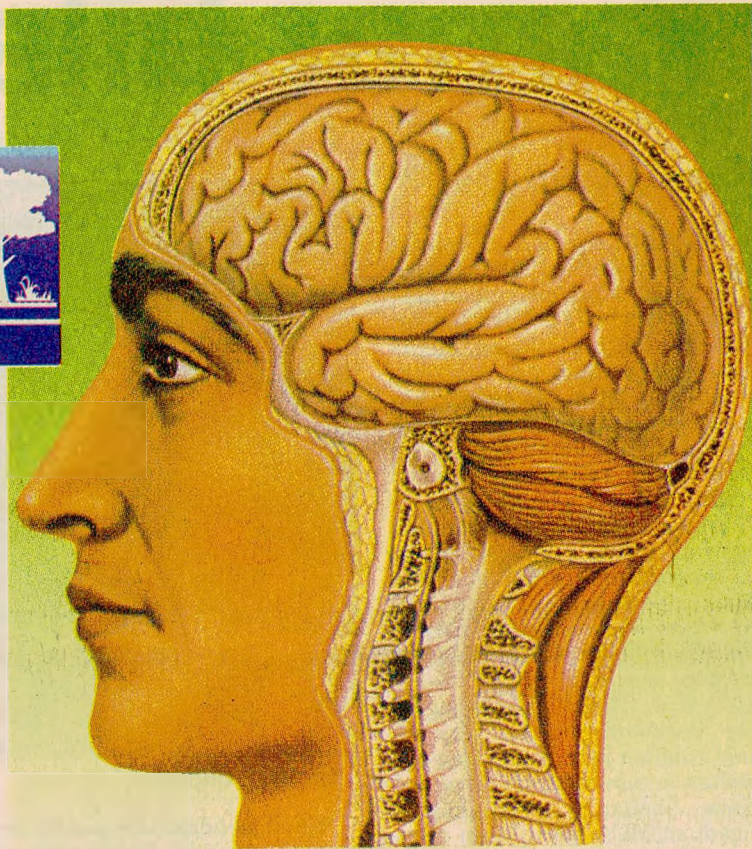
(b) Mid-Term Review of Fourth Malaysia Plan, 1981-1985

(c) New Straits Times, August 31, 1985

(d) Sixth Malaysia Plan, 1991-1995



Otak: Organ paling penting



- 8 FEB 1993
BH

OTAK adalah organ yang paling penting dan rumit dalam sistem saraf. Ia adalah pusat koordinator kepada pelbagai gerak dan yang diterbitkan daripada pancaindera dan kegiatan saraf anggota tubuh badan.

Gerakan saraf dikejutkan dengan kelajuan 320 kilometer sejam menembusi ruang sel daging tubuh. Maklumat gerakan itu menghala ke satu arah sahaja.

Otak mengawasi sensasi pandangan, dengar, cium, rasa dan sentuhan bersama-sama dengan kepanasan dan kesakitan. Otak juga mengarahkan pemikiran, ingatan dan semua pergerakan anggota tubuh badan.

Otak adalah terdiri daripada sel saraf yang beratnya lebih kurang 1.4 kilogram untuk orang lelaki dan 0.9 untuk perempuan. Otak mengandungi lebih kurang 10 bilion sel. Setiap sel dalam otak boleh berfungsi dalam satu atau dua perkara yang ia mampu bertindak.

Bahagian utama dalam otak ialah *cereberum*, *cerebellum*

dan *stern*. *Cereberum* yang menguasai 90 peratus daripada berat otak adalah dianggap sebagai nadi kepada ingatan dan intelek. *Cerebellum* pula mengarahkan gerakan daripada urat dan daging (*muscular*) dan mengimbangkan serta mengkoordinasi gerakan tubuh badan dan mengawasi imangan tubuh badan.

Cerebellum juga selain daripada mengarahkan pergerakan tubuh badan turut menjaga otot supaya harmoni dengan kegiatan seperti ketika berjalan dan dalam gerak laku yang lain.

Sementara itu, *stern* pula menghubungkan otak dengan tulang belakang yang menjadi rangka anggota tubuh dan menghubungkan semua saraf tubuh badan kepada otak.

Seluruh otak adalah diselimumkan dengan kulit yang dikenali sebagai *membrane* dengan panggilan *meninges*.

Dengan itu, kedudukan otak adalah lebih selamat dan terhindar daripada kerosakan fizikal. Otak juga mempunyai saluran darah untuk menyempurnakan aliran darah kepada

sel di dalamnya.

Apabila tubuh badan berehat, otak mengambil 25 peratus oksigen daripada darah sekalipun kadar otak cumalah dua peratus berat anggota badan.

Penyakit yang wujud dalam saluran darah di kepala menimbulkan pelbagai masalah dalam sistem saraf.

PESAN BISTARI

SEANDAINYA kamu mendedahkan rahsia kepada angin janganlah salahkan angin kerana mendedahkannya kepada tumbuhan.

— KHALIL GIBRAN

TAHU cara-cara untuk mendengar dan anda akan mendapat faedah daripada mereka yang suka bercakap kotor.

— PLUTARCH

Tenaga to buy Thai and Singapore power

STAR
- 9 FEB 1993

KUALA LUMPUR, Mon. — Tenaga Malaysia Bhd will buy electricity from Singapore and Thailand as part of steps to overcome the present shortage of power in the country.

Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu said today Tenaga Nasional was considering acquiring 200 megawatts for a start from each country.

He said he would be meeting his Singapore counterpart soon to discuss the matter. A similar meeting with the Thai Science Minister was also being arranged by Wisma Putra.

This was one of the decisions arrived at during a meeting between Samy Vellu and Tenaga Nasional officers at the Tenaga Nasional headquarters today.

The minister was also briefed by Tenaga Nasional executive chairman Tan Sri Ani Arope on steps taken by the Tenaga Nasional crisis management team to overcome the shortage.

Samy Vellu said Tenaga Nasional was also consider-

ing leasing electricity-generating barges from Britain and Japan which could immediately generate between 200 and 300 megawatts.

"I have extended a request to lease British barges through its High Commissioner here, Mr Duncan Slater, and we have also contacted some Japanese suppliers."

Considering these "emergency" steps, he said the ministry's task force headed by secretary-general Datuk Helmi Mohamed Noor was monitoring the situation daily.

The Tenaga Nasional crisis management team would meet again in two weeks to assess the situation.

"We hope to resolve this problem in nine months when repair and rehabilitation work on our turbines is completed," he said, adding that he would meet representatives from the Federation of Malaysian Manufacturers on Wednesday.

Samy Vellu also said Tenaga Nasional encouraged large firms to generate their

own electricity and wherever possible, it would buy "excess" electricity to be supplied to the present power grids.

In calling on industries and the public to save electricity, he said the ministry would soon ask air-conditioning companies to install time switches to the units to ensure the optimum use of electricity.

Helmi, when asked to elaborate on the proposed measures, said the ministry and Tenaga Nasional were working on achieving 600 megawatts or about 10 per cent margin for back-up supply of electricity.

"At present, the margin is quite low, and the problem is further compounded by plants breaking down or being repaired."

Helmi added that Tenaga Nasional has an installed supply of about 5,400 megawatts which was adequate to meet the industrial and domestic demands in the country.

However, the existing total capacity was only 4,700 megawatts.

TNB, govt bodies owe RM248,000 ^{Star} in quit rent arrears 9 FEB 1993

By ZARINAH DAUD

PENANG: Three government agencies and Tenaga Nasional Bhd (TNB) still owe RM248,000 in quit rent until last year.

The highest defaulter, among the four agencies in the north-east district is the Penang Municipal Council which owes RM121,000.

A spokesman said the second highest defaulter was the Penang Water Authority (RM94,000), followed by Tenaga Nasional (RM22,000).

He said the Koperasi Gabungan Negri (KGN) had not settled its accumulated quit rent totalling RM11,000.

He said the arrears had been accumulated over the years involving various sites including catchment areas and Tenaga sub-stations.

He added that the state government had issued confiscation notice to the municipal council to forfeit a site on which quit rent had not been paid.

"Most of MPPP's affected plots are open spaces and playgrounds at residential areas.

"Nevertheless, the state government and the municipal council are discussing on how to resolve the matter," he added.

The spokesman said the state government collected RM13.6 million in quit rent last year.

FLOATING POWER PLANTS

STAR
- 9 FEB 1993

Tenaga on lookout for barges with generators to meet demand

By AHMAD ZUBER IBRAHIM

KUALA LUMPUR: Tenaga Nasional is to deploy "floating power generators" in an effort to boost electricity supply and meet increasing demand.

Tenaga is on the lookout for barges equipped with generators to complement power stations and meet energy needs, Energy, Telecommunications and Post Minister Datuk Seri S. Samy Vellu said.

"Tenaga has identified the barges and is considering whether to buy or lease them. The barges are owned by foreign power operators and each can generate up to 100 megawatts," he said yesterday after a meeting with Tenaga's crisis management team.

He said the use of barges was practical as they were mobile and could be anchored off the coast where many power stations were sited.

The meeting also made decisions on how best to improve supply and distribution of electricity to the satisfaction of consumers.

They include meeting representatives of the Federation of Manufac-

turers Malaysia to find ways to cope with the power supply situation.

The ministry would like the manufacturers to change their operating schedules so supply, especially during peak hours, could be effectively distributed.

"If possible we want the factories to change the day shifts to night. The requirement at night is only about 2,500 megawatts, almost half that of the day," Samy Vellu said.

He added that if this could be done, Tenaga would not have to resort to load-shedding as supply would be enough to meet demand.

The ministry also wants offices which are the main users of air-conditioners to use time switches to save energy.

The use of time switches enables the air-conditioning units to be shut down when it is cooler.

He also said he hoped to meet his Singaporean and Thai counterparts soon to discuss mutual co-operation over power projects.

They include a Tenaga proposal to buy 200 megawatts from Singapore's Public Utility Board.

Blackout in JB despite assurance from Tenaga

- 9 FEB 1993

By RIZAL ABDULLAH

JOHOR BARU: Constant power failures have become a nightmare to the people of this town.

It is not only causing inconveniences to housewives but huge losses to manufacturers and businessmen.

Last week, Tenaga Nasional Bhd (TNB) public affairs manager Ibrahim Hassan gave an assurance that the spate of power failures experienced last month would be a thing of the past.

Despite the assurance, Johor Baru was hit by another power breakdown, lasting two hours, yesterday. It affected several major housing estates like Taman Pelangi, Taman Sentosa, Taman Century and Taman Tebrau.

Even ministers are not spared. Last month during Transport Minister Datuk Seri Dr Ling Liong Sik's press conference, there was a minute's blackout before power was restored.

Housewives are not taking the risk of stocking up

their refrigerators. Instead they have resorted to daily marketing to be on the safe side.

"Previously I used to do my marketing once a week. But I have been doing my marketing daily because of the power failures," said Puan Azizah Hamzah.

A taxi driver also goes on his daily rounds with a silent prayer, hoping there will not be a power failure or else he will have to return home with less take home pay after deductions.

"If there is a power failure, you just cannot move because there will be jams all over the town when the traffic lights go dead," said Omar Haji Abdullah.

Punters are no exception. Some have been seen buying their numbers for up to three draws at one time to be sure not to be caught in a blackout.

An irate housewife said: "Recently, Tenaga went on an *operasi potong* (disconnecting supply) for late payment of bills which is grossly unfair.

"They disconnect our supply for late payment but what has Tenaga got to say for the constant power failures?

"Is Tenaga willing to pay for the losses we have incurred and suffered?

"What about the inconvenience caused by the blackouts, some of which last as long as six to eight hours?

"We have to spend extra to buy candles and gas lamps to make sure that our children do not miss out on their homework and studies."

Ekoran pertumbuhan pesat sektor industri

- 9 FEB 1993

Krisis tenaga

Oleh BAHAROM MAHUSIN

KUALA LUMPUR 8 Feb. — Menteri Tenaga, Telekom dan Pos, Dato' Sri S. Samy Vellu mengakui Malaysia sedang menghadapi krisis tenaga yang paling buruk dalam sejarah akibat keperluan mendesak sektor industri yang berkembang begitu pesat.

Menurut beliau, krisis tenaga dalam bentuk gangguan dan kekurangan tenaga elektrik itu akan lebih teruk pada bulan Mac ini dan ia akan berterusan sehingga sembilan bulan akan datang.

Beliau berkata, dalam satu mesyuarat khas antara Kementerian Tenaga, Telekom dan Pos dengan para pegawai Tenaga Nasional Berhad (TNB) hari ini, beberapa langkah kecemasan telah dipersetujui bagi menghadapi krisis ini.

Antara langkah yang telah diputuskan oleh ke-

rajaan dan TNB ialah untuk memohon bantuan Kerajaan Singapura dan Thailand membekalkan sekurang-kurangnya 400 megawatt (MW) kuasa elektrik kepada TNB.

Kerajaan dan TNB juga memutuskan untuk membeli kuasa elektrik yang dihasilkan oleh mana-mana syarikat negara ini yang mempunyai jentera janakuasa elektrik sendiri.

"Syarikat-syarikat besar yang mempunyai janakuasa sendiri boleh mula menjual kuasa elektrik kepada kerajaan mulai sekarang dan kita akan beli," kata Samy Vellu kepada para pemberita di pejabatnya di sini.

Menurut beliau, sebuah pasukan petugas khas yang dipengerusikan oleh Ketua Setiausaha kementerian itu, Dato' Helmi Mohd Noor juga dibentuk bagi membolehkan per-

LIHAT MUKA 2

Krisis tenaga

UM

- 9 FEB 1993

bincangan antara para pegawai diadakan setiap hari dalam usaha mengawasi krisis tersebut.

Beliau memberitahu, langkah seterusnya yang akan diambil oleh kerajaan bagi menghadapi krisis itu ialah menyewa kapal-kapal janakuasa elektrik dari Jepun dan Britain untuk membekalkan elektrik.

"Saya telah berhubung dengan Pesuruhjaya Tinggi Britain di negara ini dan memintanya membantu Malaysia mendapatkan beberapa buah kapal janakuasa elektrik milik syarikat negara itu untuk kita sewa," kata beliau.

Samy Vellu berkata, jika kerajaan berjaya memperoleh kapal-kapal janakuasa itu, kapal-kapal ini boleh belayar dari satu tempat ke satu tempat yang lain di negara ini untuk membekalkan tenaga elektrik kepada janakuasa elektrik TNB yang terletak di kawasan pinggir pantai.

Penggunaan kapal janakuasa elektrik seumpama ini adalah fenomena biasa di Filipina, sebuah negara ASEAN yang juga mengalami kekurangan tenaga elektrik. Penggunaannya bukanlah penyelesaian kepada masalah tenaga tetapi membantu mengurangkan beban TNB dalam jangka masa pendek.

Samy Vellu berkata, krisis tenaga elektrik di negara ini tidak dapat dielakkan kerana TNB menerima permintaan tenaga elektrik yang bertambah daripada sektor industri.

Selain masalah itu, kerja-kerja membaik pulih beberapa janakuasa elektrik TNB di Port Dickson, Seberang Perai, Pasir Gudang, Paka, Gelugor dan Cameron Highlands juga menjejaskan keupayaan TNB menyalurkan elektrik.

Buat masa sekarang permintaan tenaga elek-

trik negara ialah 4,600MW pada satu-satu masa tetapi kapasiti maksimum semua janakuasa hanyalah sekitar 5,600MW. Daripada jumlah kapasiti maksimum ini, kuasa yang tidak dapat digunakan sebanyak 1,034MW.

Sejak awal tahun ini, gangguan-gangguan elektrik sering berlaku di beberapa tempat di negara ini, khususnya di kawasan perkilangan dan perindustrian.

Malah sebelum ini, Menteri Perdagangan Antarabangsa dan Industri, Dato' Sri Rafidah Aziz telah menegur TNB kerana gangguan tenaga elektrik terlalu kerap dan meluas, menyebabkan pengusahaan industri rugi.

Gangguan

Adalah difahamkan kejadian gangguan elektrik akan lebih buruk lagi apabila operasi tiga buah turbin janakuasa elektrik TNB dihentikan untuk penyelenggaraan pada Mac ini, yang menyebabkan TNB kehilangan kuasa elektrik kira-kira 500MW.

Dalam menghadapi krisis ini, Samy Vellu berharap, para pengguna elektrik di negara ini, sama ada pengguna di rumah-rumah kediaman atau di kilang-kilang, menjimatkan penggunaan elektrik.

Beliau berkata, satu kempen penerangan akan diadakan di seluruh negara oleh kementeriannya untuk menggalakkan rakyat menjimatkan penggunaan elektrik.

Di Kementerian Tenaga, Telekom dan Pos sendiri sekarang, arahan penjimatan penggunaan elektrik sudah dikeluarkan.

"Hanya lampu-lampu dan alat elektrik yang perlu sahaja dibenarkan dipasang di ibu pejabat kementerian," kata Ketua Setiausaha kementerian itu, Dato' Helmi Mohd. Noor.

Private power grid idea under study

BT
- 4 FEB 1993

By RODHIAH ISMAIL

THE Energy, Telecommunications and Posts Ministry is toying with the idea of allowing transmission of power to be undertaken by independent operators, just like in the UK.

At present, the national power transmission grid is run solely by Tenaga Nasional.

The minister, Datuk Seri S. Samy Vellu, said the Cabinet, at its weekly meeting yesterday, was given a report on the system implemented in the power industry in the UK.

"It is only a preliminary report, and I may discuss further details with Tenaga," he told reporters in Kuala Lumpur yesterday.

Samy Vellu said if the transmission grid is operated by another company, Tenaga Nasional can concentrate on more specialised areas, like maintenance of its existing power generation, transmission and distribution network in ensuring that demand is met.

However, the idea is not expected to be realised in the

TENAGA NASIONAL'S TRANSMISSION AND DISTRIBUTION LINE LENGTH IN 1991

Lines (kilovolt)		Length (km)
275 overhead		3,596
132		6,177
66		891
33 overhead		2,441
33 underground		741
22 overhead		1,177
22 underground		757
11 overhead		826
11 underground		23,263

Source: Electricity Supply Department

BT table

near term, since it has been hardly a year ago that the Government announced its decision to bring in other players into the power generation sector of the local power industry.

Electricity Supply Department Director-General Mohd Annas Mohd Nor, when contacted by Business Times yesterday, said, in the UK, all three sectors of the

power industry, namely, generation, transmission and distribution, have been fully privatized.

He said three companies — Power Gen, National Power and Nuclear Power — are the players in the UK's power generation industry. Only one company, National Grid Company, is running that country's transmission grid.

In the distribution sector, there are 12 operators.

Earlier, Samy Vellu said the findings of investigations into last year's September 29 blackout will be submitted to the Cabinet in two weeks.

The report will outline the cause of the power failure and provide recommendations on measures to prevent a recurrence.

The incident, considered one of the worst power failures in the country, resulted in factories and industries reportedly losing millions of ringgit.

The blackout was believed to have been triggered by a lightning bolt.

Samy Vellu said he also submitted a proposal paper on the long-term electricity supply for the country at yesterday's Cabinet meeting.

He said demand for electricity in the country is expected to reach 13,000 megawatts by 1999.

He also briefed the Cabinet on the need to expedite the north sector gas pipeline project so that gas-fired power stations can be built there as soon as possible.

Power outages cost firms millions

□ FROM PAGE ONE

operations.

Matsushita experienced eight power failures in 1992 and lost 38 manhours, resulting in losses of RM1.2 million during the year.

The cement, steel and electronic industries fervently hope that Tenaga will improve its communication channels to give them sufficient notice of power disruptions to enable factory operators to reschedule production to reduce losses.

The industry said the frequent power failures is due to

economic growth having outpaced the development of infrastructure, including power supply.

Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu said Malaysia has reached its limit in terms of electricity utilisation.

The ideal is to have a reserve of 10 to 15 per cent of total consumption. But Tenaga currently produces about 5,000MW while the country's total consumption stands at 4,800MW, a reserve of just about 4 per cent. By the year

2000, he said, the country's energy requirement is projected to be 13,000MW.

To meet increased energy demand, the ministry is encouraging private sector power generation. So far licences have been offered to YTL and Sikap to set up plants.

Samy Vellu said, altogether, 10 companies applied to supply power to different parts of the country. The Economic Planning Unit (EPU) will consider the applications before submitting them to the ministry for approval.

Published by Business Times (Malaysia) Sdn Bhd and printed by The New S

Power outages cost manufacturers millions

By JENNIFER JACOBS
and SHIRENE SHAM

B7
2 FEB 1993

FREQUENT and unannounced power interruptions have caused major losses to the country's manufacturing sector and retarded its ability to increase productivity.

For some, the losses run into millions of ringgit as a result of production breakdowns, fluctuations in voltage which cause damage to equipment, and the inability of the producer to meet deadlines.

The largest loss in a single day was on September 29 last year when a nationwide blackout resulted in a loss of 2,375 manhours and RM50.3 million in revenue forgone, according to a survey by the Federation of Malaysian

Manufacturers (FMM).

Even this may not be the true figure as many industries did not report their losses. Food manufacturers incurred huge losses, and heavy industries and electrical and electronic industries were among those affected.

In Malacca, Pacific Food Products, which produces Double-Decker prawn crackers, lost an estimated RM100,000 in semi-processed merchandise as a result of the power breakdown. Everything at the beginning of the production process was lost and hundreds of cartons of semi-processed material had to be dumped.

Meanwhile, in the Klang Valley, Sony Television incurred losses in excess of RM500,000 on the day of the

nationwide blackout.

The cement industry's losses were estimated at RM3 million. Electrical charges is a major cost, comprising 18-20 per cent of production costs.

In 1990 alone, the cement industry's electrical costs were estimated at RM103 million. For every power interruption, the start-up cost is anything from RM250,000 upwards.

Another FMM survey on power interruption revealed that between March and September last year, there were 685 power disruptions in Perak, Johor, Negri Sembilan and Penang, with losses estimated at RM700,000 or 1,865.55 production hours.

Responding to queries from Business Times, several companies said although the Sep-

tember nationwide power failure was the biggest last year, it was only "a drop in the ocean" of power failures suffered by companies, especially those in the "problem zones".

The industrial zones are usually the worst affected. Taman Johor Jaya, one of Johor's main industrial sites, experiences power cuts at least three times a month. Electronics factories in the area have considered taking legal action against Tenaga Nasional for losses sustained.

"Unreliable power supply has forced factories to buy generators, which can cost up to RM100,000 and which are only able to supply half the power needed," said a spokesman of one of the 50 factories

in the area affected by the problem.

Plastic manufacturers in Johor Jaya claim they lose an average of RM2,000 each everytime there is a power disruption. In December alone there were 13 disruptions with losses of about RM26,000 each time, making a conservative estimate of RM338,000 in losses for December alone.

In the Labu area in Seremban, there were 269 cases of power failure between July 1 and November 10 last year.

The losses encountered were due to power surges which caused fluctuations in the voltage, resulting in damage to equipment and requiring additional time to re-start

See Back Page, Col. 2

More - 1 FEB 1993 electrical power by Feb 15

IPOH: The additional 300mw of electrical power needed to prevent blackouts is expected to be generated by Feb 15.

Energy, Telecommunications and Post Minister Datuk Seri S. Samy Vellu said that, although repairs on all the power plants affected had been completed, additional power would only be supplied in stages.

"We will get the 300mw power supply before Feb 5 and in some cases by Feb 15," he told reporters before leaving for Kuala Lumpur yesterday.

Samy said the 300mw of electrical supply would "keep the nation going for a while."

The minister had been reported to have said that blackouts would be a common feature if an additional 300mw of power was not generated to sup-

plement current supply.

It has also been reported that the recent spate of power failures was due to equipment breakdown and shutdown of Tenaga's stations to carry out installation works.

Breakdowns also happened because of thunderstorms and lightning.

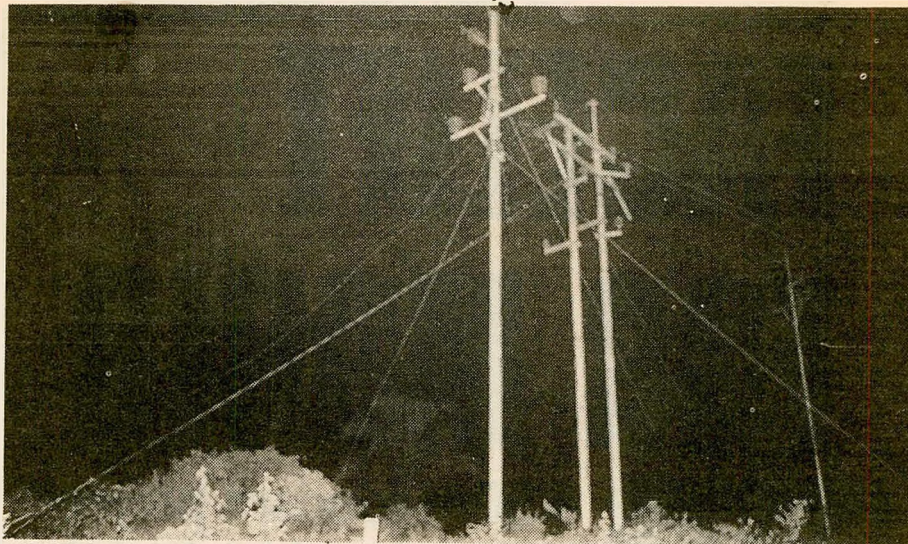
He said the ministry would hold discussion with the Singapore Public Utilities Board to obtain "reserves" from the republic to provide for the difficult times.

The ministry has yet to get a date for the negotiations, he added.

Samy said power supply would be increased when smaller turbines of 30mw are installed at power stations by June.

However, he said the bigger turbines installed would only be in service after 24 months.

The Malay Mail, Friday, January 29, 1993



SNAPPED: The cables that were down following the minor explosion

SUNGAI BESI IN DARKNESS



JASWANT:...heard popping sound

SEVERAL high tension power cables snapped at Kampung Penang Tambahan in Sungai Besi following mild rainstorm at 4pm today causing part of Sungei Besi to be in darkness until after 11pm when power was restored.

Spokesman for the Tenaga Nasional's Supply and Management Centre said the power failure was caused by the tripping of the supply when the long span cables snapped following the strong wind that caused the cables to touch.

He said when the cables, carrying 33kv, touched it resulted in a small explosion and sparks to fly and in the process it short circuiting

the supply as well as causing the lines to snap.

A long time resident in the area, Mr Jaswant Singh, 39, whose family had been staying in the area for more than 50 years said he was taking a nap in his house at 4pm when he heard a popping sound.

Upon investigation he found the sound came from the pole supporting the high tension cables behind his house and two cables had already snapped and were lying on the grass.

"About 20 minutes later I saw spark flyings and the power supply was out. Then I called Tenaga Nasional breakdown service to come and repair the cable," he said.

Tenaga ends servicing of turbines

By AHMAD ZUBER IBRAHIM

KUALA LUMPUR: Tenaga Nasional Bhd is confident that the number of power breakdowns will be greatly reduced now that repairs and servicing of turbines at its power stations have been completed.

Executive chairman Tan Sri Dr Ani Arope said yesterday the repairs and servicing involved 10 sets of turbines at the Prai, Port Dickson, Kenyir, Paka, Pasir Gudang, Kapar and Connaught Bridge (Klang) power stations.

Tenaga carried out the repairs and maintenance work during the Chinese New Year holiday period because power usage then was low as all factories were shut.

"The completion of repairs means that the machines are in good shape to generate electricity and supply is now back to normal," Dr Ani said.

He said Tenaga would start load shedding next week, adding that it would be done in stages during peak hours to avert disruption of supply.

The exercise would be done systematically to silence critics who had attributed the frequent power disruptions to load shedding.

Dr Ani also advised manufacturers to change their peak operating hours from noon to after 5pm.

The electricity capacity being generated now was 5,560 megawatts while the maximum demand was 4,600 megawatts.

Rude encounter with meter reader

18 JAN 1993

□ SUNNY had an unpleasant encounter with a meter reader who came to his house on Jan 21. He says the man came to his home in Jalan E4/8, Taman Ehsan Kepong, about 11am.

He gave the bill to the meter reader who went out leaving the gate open.

"I asked him to close the gate but he ignored me and walked to my neighbour's house a few doors away," he says.

Sunny then asked the meter reader why he refused to shut the gate.

"He rudely told me that it was not his job to do so," he says. "He did not even have a name tag on him."

He says meter reader left the gates opened in all the houses in his area.

Sunny asks if meter readers are taught how to behave on their rounds.

■ *Tenaga Nasional Berhad corporate communications manager Ibrahim Haji Hassan says they had contacted the head of department in charge of the area to advise the meter reader to be more polite to consumers.*

He adds that when meter readers are on duty they are required to wear their uniforms and name-tags.

RM1.5b tambah tenaga elektrik

2298 JAN 1993

KLUANG 28 Jan. - Tenaga Nasional Berhad akan membelanjakan RM1.5 bilion untuk menambah 1,000 megawatt tenaga elektrik ke seluruh negara mulai tahun ini.

Pengerusi Eksekutifnya, Tan Sri Ani Arope berkata, dengan penambahan itu maka jumlah tenaga akan meningkat kepada 5,000 daripada 4,000 megawatt yang ada sekarang.

Menurutnya, peringkat permulaan sejumlah 300 megawatt tenaga elektrik akan dapat disalurkan dalam tempoh tujuh bulan oleh syarikat yang dilantik untuk mengendalikannya projek tersebut.

Beliau berkata, jumlah tenaga perlu ditambah memandangkan keperluannya yang semakin meningkat dari masa ke semasa.

"Pada masa ini kita berupaya menyalurkan bekalan elektrik sebanyak 4,200 megawatt, sedangkan keperluannya ialah 3,900 mega watt sehari," katanya.

Ani menganggarkan tambahan tenaga sebanyak 500 megawatt diperlukan setiap tahun ekoran pembangunan pesat di seluruh negara.

Beliau berkata demikian kepada para pemberita selepas melawat pejabat Tenaga Nasional Berhad

Daerah Kluang, di Jalan Mengkibol, di sini, pagi ini.

Katanya, Tenaga Nasional akan memberikan rebet kepada kilang-kilang yang menggunakan generator sendiri semasa beroperasi untuk mengurangkan penggunaan tenaga elektrik.

Galakan

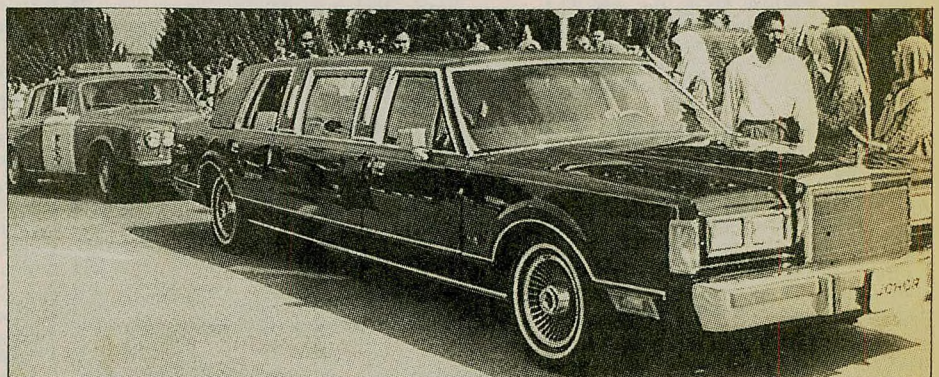
Menurut beliau, pementasan itu bertujuan menjadi galakan kepada kilang-kilang untuk mengurangkan penggantungan terhadap Tenaga Nasional bagi mendapatkan bekalan tersebut.

Katanya, selain kilang-kilang, rebet juga diberi

kepada hotel-hotel yang turut menyediakan kemudahan sendiri untuk mendapatkan bekalan tenaga.

Beliau menyarankan kilang-kilang berat yang menggunakan tenaga elektrik yang tinggi supaya beroperasi selepas waktu sibuk (malam) untuk mengelakkan berlaku lucutan beban ekoran kekurangan tenaga.

"Sejak Oktober tahun lalu sebanyak 13 lucutan beban dilakukan di seluruh negara disebabkan penggunaan tenaga elektrik berlebihan oleh para pengguna termasuk kilang-kilang," katanya.



KERETA mewah jenis Rolls Royce dan BMW dijadikan kereta peronda oleh Sultan Johor. — Foto Bernama.

TNB perkenal sistem baru

KLUANG, Khamis — Tenaga Nasional Berhad (TNB) akan melaksanakan sistem lucutan beban bekalan elektrik di beberapa kilang besar dan bandar di negara ini yang banyak menggunakan elektrik, mulai minggu depan.

Pengerusi Eksekutif TNB, Tan Sri Dr Ani Arôpe, berkata pelucutan beban itu dibuat secara berperingkat bagi memastikan bekalan elektrik negara tidak terputus secara besar-besaran seperti yang berlaku beberapa bulan lalu.

"Masa yang dipilih difikirkan sesuai selepas semua kilang dan pejabat yang ditutup sempena Ta-

hun Baru Cina sejak minggu lalu, mula beroperasi," katanya kepada pemberita selepas menderang taklimat pembangunan di Pejabat TNB Kluang di sini, hari ini.

Dr Ani dalam siri lawatan ke Pejabat TNB di Mersing, Kluang, Pasir Gudang, Johor Bahru, Batu Pahat dan Muar, selama dua hari bermula hari ini.

Beliau juga menasihatkan pemilik kilang mengubah masa pengeluaran besar-besaran mereka selepas jam 5 petang bagi memastikan saluran elektrik yang lancar di sesuatu kawasan.

"Ini kerana sebelum masa itu, iaitu dari jam 11

pagi hingga 4 petang, banyak kilang, hotel, premis perniagaan dan kediaman menggunakan elektrik.

"Sebaliknya, pengusaha kilang dan hotel boleh menggunakan janakuasa kecemasan bagi bekalan sendiri, bertujuan mengurangkan penggunaan bekalan elektrik," katanya.

Sehubungan itu, beliau berkata, TNB sedia memberi rebet khas kepada pemilik kilang dan hotel yang menggunakan janakuasa kecemasan untuk operasi masing-masing.

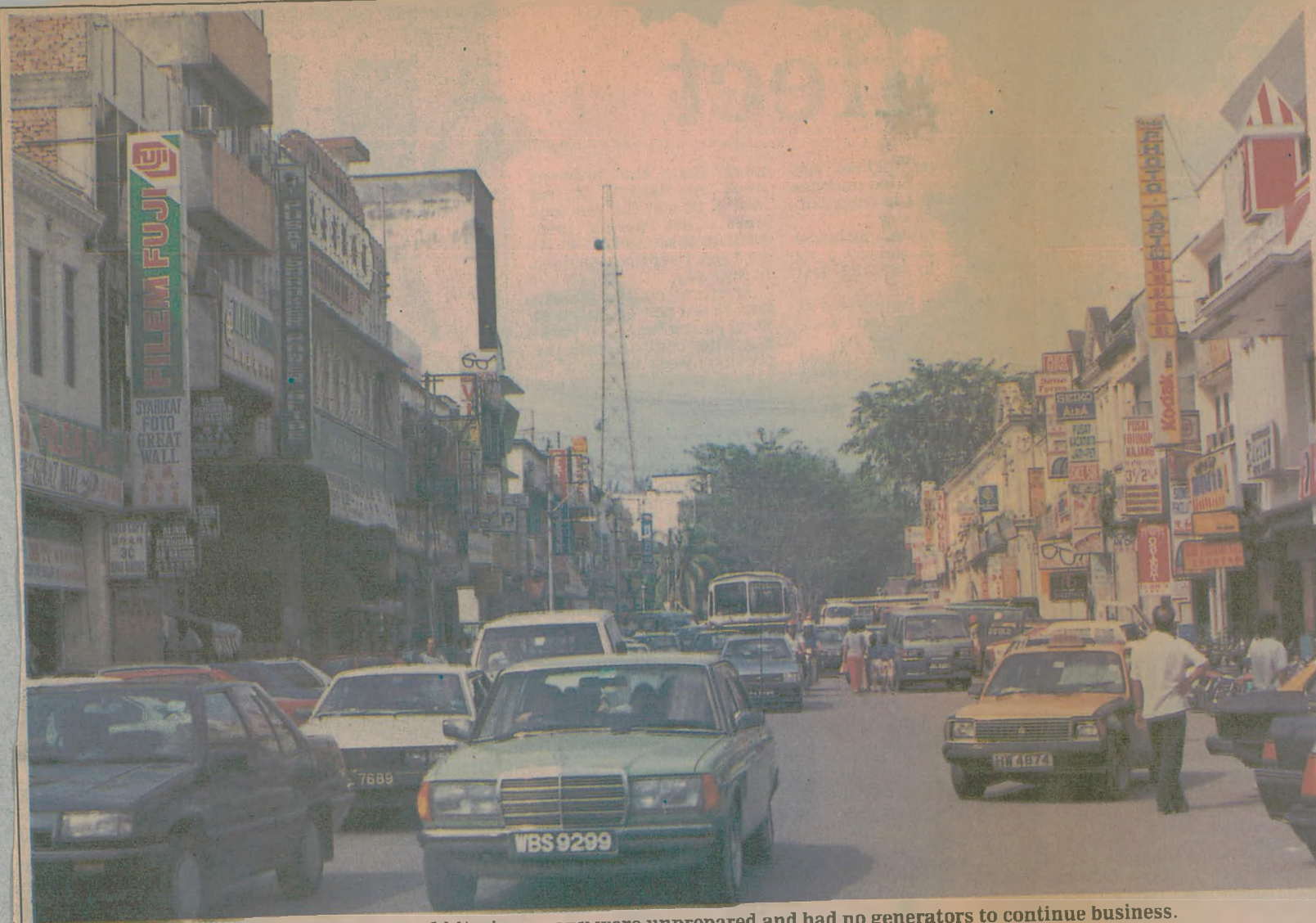
"Mereka boleh menambah tempoh penjanaan dari 32 jam kepada 40 jam sebulan. Perbincangan mengenai pemberian rebet, tempoh penjanaan

dan tanggungan TNB terhadap kilang masih dijalankan," katanya di sini, hari ini.

Sejak Oktober tahun lalu, TNB sudah melaksanakan 13 kali pelucutan beban bekalan secara berperingkat di beberapa tempat di seluruh negara. Sistem maklumat diperolehi dari Pusat Kawalan Beban Kebangsaan (NLDC) di Kuala Lumpur.

Dr Ani juga berkata, TNB akan memasang talian baru untuk menambah 1,000 megawatt iaitu dari 4,500 megawatt kepada 5,500 megawatt sebelum akhir tahun ini bagi meningkatkan bekalan elektrik negara.

29 JAN 1985



Traders along Jalan Sulaiman were hard hit, since many were unprepared and had no generators to continue business.

Tenaga trouble shooters for Kajang

**Story and picture
by L.H. Lim**

TENAGA Nasional Berhad in Kajang has formed a "trouble shooting" team of inspectors in its bid to reduce the frequency of power failures in Hulu Langat.

Its senior district manager Azman Mohamed said the team, comprising technicians and engineers, would conduct daily checks on the main cable network along main roads in the district to ensure power was delivered to users "on tap".

"These men will inspect for physical impediments and remove any obstructions that would disrupt power supply."

"We need to stop problems before they occur as we have a duty to supply power to users," he told the *New Straits Times* following a spate of power failures in the district recently.

The failure was especially bad around the second week of the month with power being disrupted on the 11th, 13th, 14th and 15th. Each failure lasted between two and four hours.

Traders along Jalan Besar and Jalan Sulaiman were hard hit, since many were unprepared and had no means to continue business

with generators.

Photo studio owner Lim Yew Peng said the power failure not only disrupted his work but also damaged his expensive equipment.

He claims to have lost more than RM5,000, including the cost of repairing damaged equipment.

"I also have to face angry clients whose films were damaged due to the power failure," he said.

A fast-food restaurant manager, Niza Umarhar, said the recent power failure had caused the restaurant to lose about RM5,000.

She said any breakdown of power supply which last-

ed more than one hour would make the uncooked chicken and burgers go bad.

Azman said Government departments and agencies were sometimes at fault as unco-ordinated action in the past had led to long power disruptions.

He said if departments could co-ordinate work on infrastructure development, for instance, then some of the power disruptions could have been avoided.

Azman said, for example, work to install traffic lights or lay water pipes could be done in one operation if there was proper co-ordina-

tion between the relevant departments.

Azman said TNB was in the midst of installing more electricity transmission and distribution intake lines in the district.

He said Cheras Jaya would have one transmission intake while Sri Kembangan, Bandar Baru Bangi (Section 9 and Section 10) would have three intake points by July.

Another two new transmission intakes would be built in Beranang and Sungai Chua and the Universiti Kebangsaan Malaysia substation would be operational in 1994.

Sikap starts talks on power sales to Tenaga

BT
26 JAN 1993

By C.S. TAN

SIKAP Power Sdn Bhd, the second company after YTL Corp to be licensed as an independent power producer (IPP), has started negotiations with Tenaga Nasional Bhd and Petronas.

An official of Sikap Power told Business Times the company is negotiating the sale of electricity to Tenaga Nasional (the national distributing authority) under a 21-year contract, its licensed life span as an IPP.

"The power purchase agreement (PPA) must be signed with Tenaga. It will provide income for us for 21 years and be the security for the banks," he added.

With the PPA, Sikap Power should be able to obtain project financing for its proposed RM3.2 billion power plant to be constructed in Lumut, Perak.

It costs about RM2.5 billion to build a 1,000 megawatt (MW) power plant. Thus, Sikap Power's proposed 1,300MW power plant will cost about RM3.2 billion, he said.

Sikap Power is, at the same time, negotiating with Petronas on a gas supply contract, also for 21 years.

Both IPPs, namely, Sikap Power and YTL Corp, will build gas-fired power stations. This is the trend worldwide because gas is a cleaner fuel than oil or coal.

Sikap Power's plant will tap gas from nearby pipelines to be laid under Phase Three of the Peninsular Gas Utilisation project.

Malaysia has large gas reserves and even Tenaga is converting, over time, its power stations to gas from other fuels.

It was announced last

MALAYSIA'S GENERATION CAPACITY GROWTH 1993-96

Approved IPPs	Location	Type	Capacity	Completion
YTL Corp	Paka, Terengganu	Gas		1995
	Pasir Gudang, Johor	Gas	1,000MW*	1995
Sikap Power	Lumut, Perak	Gas	1,300MW	1996
Tenaga's new projects	Sungai Piah, Perak	Hydro	55MW	1993
	Malacca	Gas	220MW	1994
	Serdang, Selangor	Gas	550MW	1994
Tenaga's expansion at existing plants	Pergau, Kelantan	Hydro	600MW	1996
	Kapar, Port Klang	Gas	180MW	1993
	Connaught Bridge, Klang	Gas	60MW	1993
	Pasir Gudang, Johor	Gas	60MW	1993
			4,025MW	
Tenaga's present capacity: 5,560MW				
Expected demand in year 2000: 10,000MW				

* can be increased to 1,500 MW

BT table

month that Sikap had won approval to become an IPP. However, the company was reported to be Syarikat Indah Kejuruteraan Perak, abbreviated to Sikap.

The official was emphatic that this was incorrect. "The licence from the EPU (Economic Planning Unit), states Sikap Power," he said.

Sikap Power, with an office in the Amoda Building in Kuala Lumpur, is wholly-owned by a group of Bumi-putera entrepreneurs and professionals. Some of the professionals are former executives of Tenaga. The official said the owners prefer to keep a low profile for the time being.

Although they will be divesting part of their shareholding, they will "try to maintain a stake of 51 per cent in the project", he said. The owners plan to divest 25 per cent of the shareholding in the generating station to a foreign party which will be the turnkey contractor for the construction of the station.

A separate company will be formed to operate and provide maintenance for the power station.

Some divestment will also be made to local parties, in particular companies in Perak, as the power station will be built in that state. They can subscribe for up to 24 per

cent of the shareholding in the project.

The Perak State Economic Development Corp (SEDC) has been invited to participate in the project. Other institutions such as Lembaga Urusan dan Tabung Haji (Luth) and Permodalan Nasional Bhd (PNB) may also be invited.

"A few parties have shown interest in the project," the official said, adding that capital requirements for the project are huge.

The capital structure in terms of debt/equity ratio can be 20:80, that is, 20 per cent capital from the shareholders and 80 per cent bank borrowings.

As the project costs RM3.2 billion, even a shareholding of 10 per cent means an investment outlay of RM320 million, of which, the shareholder has to contribute more than RM60 million — by no means a small sum.

The project will require bank loans for a period of about 13 years.

Provision has been made in the cost estimates for swings in foreign exchange and interest rates.

On the choice of Lumut as the location, the official said Tenaga itself felt that a power station can be located there. He said the sheer size of the investment means it will be a substantial contribution to industrialisation in Perak.

YTL's plants will be at Paka and Pasir Gudang. It is understood that if IPPs had not entered the scene, Tenaga would have had to build power stations at Lumut, Paka and Pasir Gudang.

These projects will now be undertaken by IPPs.

The Lumut power station, being close to the sea, will use sea water for cooling purposes.

The official said that Sikap Power will build a combined cycle generating station.

Combined cycle is the most efficient form of fuel-fired power generation. For the same reason, Tenaga is purchasing steam turbines and other equipment to convert some of its plants to employ combined cycle technology.

In a combined cycle plant, the exhaust hot gas is recovered to fire a boiler to produce super-heated steam to turn a steam turbine. This steam turbine thus runs on zero fuel.

STAR

27 JAN 1993

6

Tenaga urged to carry out power projects fast

KUALA LUMPUR: Power generation projects lined up by Tenaga Nasional Bhd need to be implemented immediately and efficiently to meet the increasing demand for electricity and support the rapid industrialisation programmes, Electricity Supply Department (ESD) director-general Mohamad Annas Mohamad Noor said yesterday.

He said this was necessary as the demand for power was expected to triple by 2020.

"This means that we need to have a power generation capacity of at least 25,000 megawatts, five times more than the current capacity."

He added that this called for investments of about RM100 billion to be shared between Tenaga and the inde-

pendent power producers (IPPs).

Mohamad Annas said Tenaga should implement quickly the new power projects as any delay would hamper the growth of the industrial sector.

Tenaga has set aside RM37 billion to build new power generation facilities and upgrade existing ones over the next 10 years.

Electricity demand was expected to increase by 11.9 per cent annually for the 1990-1995 period but projected to drop slightly to 9.35 per cent annually for the 1995-2000 period.

Mohamad Annas said that in future, IPPs would play a prominent role in the supply of electricity to customers. This would lessen the burden on Tenaga, allowing it to venture into other areas of power generation.

Tenaga to open for tender 3 gas turbines

TENAGA Nasional has decided to open for tender the three additional gas turbines for the Serdang Power Station Project in Selangor.

In a statement released yesterday, Tenaga said the project in Serdang will be carried out in two phases.

The first phase, comprising two gas turbine units each with 110MW, is expected to come onstream by May next year. The second phase, with three units of 135MW each, is scheduled to be operational by end-1994.

In its meeting held on January 20, Tenaga's board of directors has also decided to open for tender the installation of six industrial gas turbines and four aeroderivative gas turbines.

The gas turbines will be installed at the Connaught Bridge Power Station in Klang, Sultan Salahuddin Abdul Aziz Power Station in Kapar, Selangor and Sultan Iskandar Power Station in Johor.

Late last year, Tenaga awarded the contract for the installation of two gas turbine units, each 110MW capacity at Malacca Power Station. The first unit is expected to come onstream in December 1993 with the second unit in January 1994.

Tenaga added that various units now undergoing scheduled maintenance, repairs and rehabilitation are being hastened for early completion and operation.

The generator rotor of one of the 120MW units in the Tuanku Jaafar Power Station in Port Dickson, which was sent to India for repairs, has left Bombay port on 18 January and is scheduled to arrive at the power station via Port Klang in the first week of February.

The units that underwent repairs and maintenance at the Sultan Ismail Power Station in Paka, Terengganu, and Connaught Bridge Power Station, Klang, are already back in operation, thereby bringing a combined capacity of 226MW to the system.

Samy to look into power woes in Sabah

STAR
21/1/93

By P.K. KATHARASON

KOTA KINABALU: Energy, Telecommunications and Post Minister Datuk Seri S. Samy Vellu will be in Sabah the middle of next month to discuss the problem of power shortages and how the Federal Government can solve it.

A ministry spokesman said yesterday Samy Vellu was seeking an allocation of RM60 million

from the Treasury to meet the immediate requirements of the state.

Samy Vellu's visit is tentatively fixed for Feb 15-16 and the spokesman said he would be meeting Sabah Electricity Board and other officials to work out plans to overcome the frequent power supply disruptions.

Sabah has been one of the worst hit states in Malaysia by frequent black-

outs because of shortages of power generation in the west coast grid.

Consumers here have called for a complete overhaul of SEB as they said nothing much had been done for years to solve the electricity problem in the state.

On Tuesday, Samy Vellu said the SEB's bid to build and operate power stations had hit a snag as the board was facing

financial constraints.

His ministry had requested RM60 million to fund the projects and the Economic Planning Unit in the Prime Minister's Department was looking into it.

Samy Vellu said he would also be bringing the matter to the Cabinet for speedier approval.

The SEB, under the charge of the Federal Government, said last

week that it was forced to carry out load shedding due to the low water flow to the Tenom Pangi hydro station and breakdowns at the Penampang and Labuan stations.

Power cuts were due to continue through Chinese New Year but a SEB spokesman gave an assurance yesterday that electricity supply would be back to normal before this weekend.

TNB: End soon to Perak power disruption

STAR
2/1/93

IPOH: Tenaga Nasional Bhd (TNB) has assured the state government that most of the power disruption in industrial estates will be solved by the middle of the year.

State Public Enterprise and Industry Committee chairman Datuk Junus Wahid said Tenaga gave the SEDC's state industrial development committee the assurance at a meeting yesterday.

Junus said Tenaga officials told the meeting that breakdowns in the Kinta Free Trade Zone had been rectified with the installation of underground cables which replaced the old overhead lines.

"Tenaga said it was confident that in six months it will be able to rectify the power supply breakdowns at Jelapang, Meru and Pengkalan industrial estates," he said.

Tenaga Ipoh area manager Datuk Haji Abdul Samah Ahmad, who also attended the meeting, said the installation of underground cables would be done in stages as specialised personnel and time was needed for the work.

He said another cause of disruptions was load-shedding for repairs and servicing of turbines between 10am and noon or 2pm and 4pm.

Abdul Samah said the power supply in Perak would also increase by 55MW when the Sungai Piah hydro-electric station is commissioned later this year.

The other hydro-electric stations are at Temengor, Bersia, Kenering and Chenderoh.

FREQUENT POWER DISRUPTIONS

Crisis management team being set up ^{BT} 20/1/93

By **RODHIAH ISMAIL**

A CRISIS management team, led by Tenaga Nasional executive chairman Tan Sri Ani Arope, is being set up to tackle the current problem of frequent power disruptions.

Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu said the team will be entrusted to look into ways of expediting turbine repair work currently taking place at Tenaga's power generation plants and also the installation of several new turbines.

Speaking to reporters in Kuala Lumpur yesterday after attending an hour-long emergency meeting with senior officials of Tenaga and the ministry, he said the frequent power failures are mainly due to the repair work currently carried out at several major power stations, including in Port Dickson, Connaught Bridge in Klang and Pasir Gudang in Johor.

The minister said the repair work has cut down Tenaga's power supply by 1,034 megawatts (MW), thus compelling the company to resort to load shedding in some areas.

In practising load shedding, he said, Tenaga has been asked to properly manage the move by informing tenants or residents of the affected areas early.

He said as an effort to reduce the frequency of load shedding, Malaysia plans to discuss with Singapore and Thailand the possibility of obtaining power supply from them as spinning reserves.

This is to enable Tenaga to source power from the two countries whenever there is a shortage for such reasons



□ **ANI AROPE ... to lead team**

as equipment repair and breakdowns, he said.

Samy Vellu said the discussions will initially be between Tenaga and the relevant public utility authorities of the two countries. "But I have asked Ani whether the ministry can take over and hold the talks on a government-to-government basis.

"It is not a question of using their supplies immediately or interchanging electricity but to put the supplies on the spinning reserves.

"Instead of having 300MW spinning reserves here, we will ask them (Singapore

and Thailand) for the reserves and we will pay for it," Samy Vellu said.

He said Malaysia may need some 300MW in spinning reserves from Singapore, adding that the volume needed from Thailand is yet to be determined. "At present, we are using only between 30MW and 40MW of electricity from Thailand."

Samy Vellu said the Government has called for tenders for the installation of two new gas turbines as part of efforts to expand Tenaga's generating capacity.

The first project is for the installation of 2 X 220MW

turbines in Malacca. He said the contractor for this project has been selected. The other project is for the installation of 2 X 110MW turbines in Serdang, which has been approved for implementation.

Samy Vellu said these turbines are scheduled to be operational in 13 to 15 months' time. Besides the two projects, Tenaga will also install another four turbines with capacity to produce 515MW of electricity.

He said by the end of this month, Tenaga's capacity is expected to increase by 200MW following the completion of repairs on some turbines. Power supply is only expected to return to normal by the end of July this year once all the turbines are repaired and the new ones installed.

On the power supply problem in Sabah, he said the Sabah Electricity Board (SEB) is taking measures to overcome it but financial constraints have hampered its efforts.

"I will raise this matter with the Treasury and Cabinet to enable the SEB to obtain financial assistance," he said.

He added that Sabah needs about RM60 million from the Federal Government to help it overcome the power crisis. A proposal to allocate the amount to SEB has been submitted to the Economic Planning Unit (EPU) for approval.

Sabah also has in the pipeline a plan to construct a hydro-power plant costing more than RM750 million in Liwagu. The EPU has approved the project and consultants have been appointed, Samy Vellu said.

British privatization plans run into red light

The UK Government's privatization campaign is increasingly like London Underground's infamous Northern Line: spurts interspersed with long halts in tunnels.

THE tunnel seems particularly dark at the moment. Lord (Nicholas) Ridley, an ardent Thatcherite and former transport secretary questioned in *The Times* whether rail privatization was "worth the parliamentary, political and managerial hassle".

Lord Young, a former industry secretary, told the Director this month that he wondered "if we aren't trying to privatize some things which basically can't or shouldn't be privatized".

Ministers regret the delay, but insist that the train will be moving off soon. Though coal privatization is postponed, rail privatization is imminent and the Post Office is a strong new candidate.

Privatizing coal was bound to be hard. In the autumn, ministers were divided over the "one lump or two" argument: should the industry be sold as a whole or in bits?

A single industry could spread risk between pits, and it would enjoy some negotiating strength with the coal customers, National Power and PowerGen. But the hoped-for cost-cutting from British pits competing against each other would be lost.

Then the roof caved in. Uproar greeted Michael Heseltine's plan to slim the industry for privatization by closing 31 pits.

The president of the Board of Trade retreated. The results of his energy review are expected next month. Privatization has been abandoned for this parliamentary session.

To the anger of John MacGregor, the transport secretary, the coal fiasco has held up rail privatization.

But, Lord Ridley notwithstanding, the light is turning amber. A privatization Bill is due next week, to become law by autumn 1993.

Rail privatization has got ministers worried. Unlike air passengers, rail customers often expect to be able to turn up when they want and jump on the first available train. On some routes they insist that, if they miss one train, another should come shortly.

If, following privatization, those expectations are disappointed, ministers could face continuing unpopularity over what they did.

Ministers have modified their language. John Major now calls the rail plans "semi-privatization" and MacGregor calls them "commercialisation".

They will go slowly. It could take 12 years to privatize the system fully, MacGregor told the Commons last week.

More subtly, the Government has modified its policy. The original plan was to open passenger services to free competition. Track and signalling would be run by a new body, Railtrack. But trains themselves would be run by franchised providers, offering competing services on each line.

If you travelled from (say) London to Manchester, you could choose between going on a British Rail train and one run by an entrepreneur like Richard Branson.

The Government is backing away from that. Its fear is that the entrepreneurs would pick the best peak-time services. Off-peak services would be left to British Rail, or disappear altogether.

So the right to offer services on an individual line will now be sold as a whole. The franchisee will provide the trains, peak and off-peak, to a tight brief set by a government appointee. Only on a few routes will "open access" (that is, competition) be allowed.

Even in those cases, the core service will be provided

PRIVATIZATIONS PAST

Main sales under Conservative governments

Date	Company	Type of sale
1979	British Petroleum	43.7% of shares*
	ICL	25% holding
1981	Cable and Wireless	94.4% of shares
	British Aerospace	100% of shares*
1982	Britoil	100% of shares*
	Amersham International	100% of shares*
	National Freight Corp	Management buy-out (MBO)
1983	Associated British Ports	100% of shares*
	British Rail Hotels	Trade sale
1984	Enterprise Oil	100% of shares
	Sealink	Sold to Sea Containers
	Jaguar	100% of shares
	British Telecom	76.1% of shares*
1985	British Shipbuilders	Trade sales/MBOs
1986	British Gas	100% of shares
	National Bus Company	Trade sales/MBOs
1987	British Airways	100% of shares
	Rolls-Royce	100% of shares
	British Airports Authority	100% of shares
1988	Rover Group	Sold to British Aerospace
	British Steel	100% of shares
1989	Water/sewerage companies	100% of shares
1990	Girobank	Sold to Alliance & Leicester building society
	Regional electricity companies	100% of shares
1991	Generating companies	100% of shares
1992	Trust ports	Trade sales/MBOs

Source: HM Treasury; "Guide to the UK privatisation programme", June 1992

* In tranches; date is of first tranche.

BT table

by one operator who will be eligible for government subsidy. Any other operator running a train on the route will have to compete without subsidy.

British Rail is hostile to MacGregor's proposal. Though not against privatization, it would rather be broken up into perhaps 30 small, mainly geographical companies.

These would be spurred to perform by the threat of possible takeover or the loss of their area franchise. The break-up would enable the railway to get rid of deadening nationwide agreements with the powerful rail unions, thus saving costs.

MacGregor, however, is firmly against British Rail's preferred solution. He points out that the companies would depend on subsidy, a

poor basis for a successful privatization. His advisers doubt if any system dominated by British Rail management will ever be cost-efficient.

A third big privatization, that of the Post Office, could soon get a green light. Margaret Thatcher ruled it out for the eccentric reason that voters would not tolerate private ownership of something called the Royal Mail.

She is gone, but ministers still hesitate. They fear that privatization would upset the 19,000 or so sub-postmasters, private shopkeepers franchised to run post offices; about half of these would go out of business if the Post Office were run on a strictly commercial basis.

And they worry that the public might think privatization threatened the uni-

versal postal rate, which ensures that it costs the same to post a letter to any part of Britain.

Heseltine, the responsible minister, insists the universal rate is "not negotiable". So far, he is committed only to selling the Post Office's parcels operation.

Politics aside, big benefits could be expected from selling the Post Office entirely. It would raise perhaps £2 billion (£1 = RM3.99) for the Treasury. It would free Post Office management to invest more in new technology — essential if the post is to compete with competitors like the fax.

Moreover, the European Community is slowly liberalising postal services. A privatized Post Office would hope to expand into Europe. A publicly owned one, held back by the Government's distaste for state enterprise, would not.

When these three are done, will that signal a halt to privatization? Tory grandees may hope so. So does public opinion: the proportion favouring more privatization has fallen from 41 per cent in 1984 to 31 per cent in 1992, according to MORI.

But Stephen Dorell, the Treasury minister in charge of privatization, says that assets worth £250 billion remain in state hands. Bits of holdings in privatized firms remain to be sold.

Many of the departmental agencies set up under the Government's "Next Steps" programme could in theory be marketed. If the Post Office can be sold, why not the Ordnance Survey or the Driver and Vehicle Licensing Agency? And £1.5 billion of public-sector work is being put out to tender this year under the Government's market-testing programme.

Classic privatization, in the shape of the sale or flotation of whole industries, is coming to an end. But John Major's Government is still ambitious to shift more functions from the state to the private sector.

The train will judder forward many times yet before it reaches the end of the line. — The Economist

Federal Power expects RM200m turnover this year

BT
20/1/93

By MOHSIN TAIB

FEDERAL Power Sdn Bhd, a subsidiary of Permodalan Nasional Bhd, expects to achieve a turnover of about RM200 million for the current year compared with RM161.4 million previously.

Federal Power chairman Tan Sri Abu Zarim Omar said this is in view of the company's increased capacity and prospects of power cables in both the domestic and international markets.

He said Federal Power plans to participate in the international market and has tendered for contracts in Brunei, Sudan and Bangladesh.

He was speaking to reporters after the opening of Federal Power's RM42.5 million cross-linked polyethylene (XLPE) cable plant in Shah Alam yesterday, which was officiated by International Trade and Industry Minister Datuk Seri Rafidah Aziz.

Federal Power's cables were previously mainly for the domestic market with Tenaga Nasional being its major customer together with Sarawak Electricity Supply Corp (Sesco).

Last year, sales to Tenaga Nasional accounted for 80 per cent of Federal Power's total turnover while the balance was sold to Sesco and other local companies.

Zahir said Federal Power also plans to go further into upstream and downstream activities with the incorporation of its two subsidiaries, FPT Industries Sdn Bhd and FPT Engineering.

FPT Industries makes aluminium rods, a key material, and has plans to venture into the manufacture of other raw materials while FPT Engineering offers engineering services which include cable laying, engineering and construction of power systems.

Zahir said the company intends to diversify its market to reduce its dependence on Tenaga Nasional contracts.

However, he added, Federal Power is negotiating with Tenaga Nasional to extend its contract as it will benefit both parties. Currently, Tenaga Nasional's contracts are for two years.

Under its five-year expansion plan beginning 1988, Federal Power has increased its production capacity from 3,000 km of cables a year to 5,000 km a year, including 2,000 km of XLPE insulated cables.

Federal Power currently enjoys about 30 per cent to 40 per cent of the power cables market valued at about RM800 million a year.

The company will also implement a progressive vendor programme aimed at encouraging genuine Bumiputera vendors and contractors to become its suppliers or agents.

Irked by power cuts

□ Frequent power failures in the area where he resides is worrying **DEPRIVED** of Kepong.

He says there had been a number of power cuts at his home in Jalan Cemara 3/2 Sri Damansara in Kepong since the middle of last year.

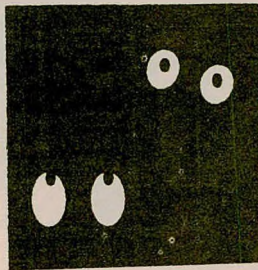
"At least once or twice every month, there will be no electricity supply in

my area," he says. "On Jan 12, there was no electricity from 7pm-2am."

He says he has contacted Tenaga Nasional several times and they gave him various excuses, including cable fault and tripping.

■ *Tenaga Nasional Bhd* assistant public affairs manager **Nik Najiha Nik Ahmad** says the black-out on Jan 12 was due to a load-shedding exercise.

Commenting on the frequent power failures since middle of last year, she says there is heavy construction work being carried out in the area around where the complainant lives. She says the cables tend to get damaged, resulting in the frequent blackouts.



MOVE TO SUPPLEMENT POWER UNITS

Tenaga to install five gas turbines

BT
18 JAN 1993

By JAHABAR SADIQ

TENDERS have been called for the installation of five 33-megawatt gas turbines in high demand areas such as industrial estates and cities, Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu said. They will be used as supplementary power units to Tenaga Nasional's present generating plants.

The tenders were called on Saturday and a month has been set for bids to be accepted, he told reporters in Tapah yesterday.

Last November he had said that the gas turbines, each costing about RM30 million, will be purchased by June to increase Tenaga's generating capacity of 5,560 MW.

"Tenaga cannot supply electricity immediately on demand although industries can come up overnight. They have to plan for such power



□ SAMY VELLU

supply requirements," Samy Vellu said.

On the current power supply disruptions, he said he will call for a meeting with Tenaga officials this week to discuss its supply problems and said he hopes a solution can be found soon.

He defended Tenaga's

current maintenance programme, which is one of the factors behind the present power supply disruptions, saying the utility company has to maintain its plants in order to prevent other problems from occurring.

"Some of the Tenaga plants are behind schedule in undergoing maintenance, some by as long as six months, due to consumer requirements. Whatever it is, maintenance work must be carried at some point in time," he added.

Tenaga said on Friday that nine of its power generating plants, with a combined capacity of 787 megawatts, are out of operation due to maintenance work, repairs or are being converted to gas-fired units.

It issued the statement after International Trade and Industry Minister Datuk Seri Rafidah Aziz called on Tenaga to buck up and minimise breakdowns which

have occurred frequently over the past few weeks.

In the statement, Tenaga Nasional said that although its present generating capacity is more than the existing demand of 4,600 MW, the situation could change if unexpected breakdowns occur at any of its remaining plants.

The statement said the company will submit to the Government a comprehensive report on the power supply disruptions, while taking steps to minimise breakdowns. It will also continue to carry out restoration work to improve the situation and expect such work to be completed by March.

It is also setting up new power plants and facilities to increase capacity, including the 55-MW Sungai Piah hydro-electric station, the 220-MW Malacca power station, the 550-MW Serdang power station and the 600-MW Per-gau power station.

Tenaga told to speed up repair work

NST

20 JAN 1993

By Alex Choong

KUALA LUMPUR, Tues. — Tenaga Nasional Berhad has been instructed to speed up maintenance and repair work at some of its stations to restore some of the electricity supply that has been disrupted.

Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu said this would restore at least 200 megawatts of the 1,304 megawatts which has been disrupted.

The stations where maintenance work will be carried out are in Port Dickson, Prai, Pasir Gudang, Paka and Gelugor.

Speaking to reporters after meeting Tenaga executive chairman Tan Sri Dr Ani Arope and senior management staff, he said he had also instructed Tenaga to initiate discussions with Singapore and Thailand on the possibility of getting electricity supply from the two countries during major breakdowns.

Samy Vellu said Tenaga had to ensure that there would be a "spinning reserve" from Singapore and Thailand to fall back on.

He also instructed Tenaga to set up a crisis management team to be headed by Ani and to map out a comprehensive plan to ensure minimal power disruptions.

On two immediate Tenaga projects, he said turbine stations were being established in Malacca and Serdang, capable of supplying 220 megawatts and 200 megawatts respectively.

"Installation is expected to take between 13 and 15 months to complete."

Samy Vellu said the Tenaga management board would meet tomorrow to decide on the contracts to be offered for the installation of four more turbine stations which could provide a total output of 515 megawatts.

He said he would meet Finance Minister Datuk Seri Anwar Ibrahim soon to discuss the need to instal five more power generating stations.

"I hope Anwar and the Cabinet will agree so as to ensure that these projects can start as soon as possible," he added.

Samy Vellu had two days ago said in Tapah that Tenaga had called for tenders

for the supply of five mobile gas turbines, each with a capacity of 33 megawatts, to alleviate its current power supply problems.

Tenders were called last Saturday for the mobile sets which are expected to be installed in areas which have a high demand for electricity supply.

He had said that the gas turbine stations would be installed in industrial estates and the cities.

On improving electricity supply in Sabah, Samy Vellu said the Ministry had forwarded to the Economic Planning Unit (EPU) an application for RM60 million for the Sabah Electricity Board.

"I will bring this matter up in Cabinet," he added.

He said efforts had been taken to ensure that people in Sabah enjoyed electricity supply and that he would visit the State at the end of this month to check the various projects.

Samy Vellu said that of immediate concern was the Liwagu hydro-electric power plant, adding that the Federal Government was concerned with the people's welfare there.

19/1/93
STAR

Samy and TNB men to discuss disruptions

KUALA LUMPUR: Energy, Telecommunications and Post Minister Datuk Seri S. Samy Vellu hopes to meet Tenaga Nasional Berhad officials this week to find a solution to the frequent breakdown of power supply.

The meeting will discuss reports on the power situation and its implications on the industrial sector which suffered losses due to disruptions.

The minister's press secretary, S. Ganapathy, said the meeting would also find ways to speed up purchase of mobile gas turbines.

Samy Vellu had been quoted as saying the disruption of power supply would be resolved with the purchase of five 33MW mobile gas turbines. Tenders were out last Saturday.

Ganapathy added that the meeting with Tenaga could not possibly be held yesterday as the Minister was busy attending the Cabinet meeting and the special Parliament session to amend the Constitution.

Crisis team to tackle power cuts

STAR
20 JAN 1993

By AHMAD ZUBER
IBRAHIM

KUALA LUMPUR: Tenaga Nasional Berhad (TNB) has set up a crisis management team to tackle the frequent disruption of electricity supply and to expedite power projects to meet increasing demands.

Energy, Telecommunications and Posts Minister Datuk Seri S. Samy Vellu said yesterday the team, headed by TNB executive chairman Tan Sri Dr Ani Arope, was expected to start work immediately.

The team would, among other things, study reports on the power disruptions and find a speedy solution.

"We had anticipated this problem and are taking immediate measures to remedy them. Supply will be adequate only by June," Samy told reporters after a meeting with top officials of TNB here.

He said the ministry and TNB would also discuss with the Singapore Government and its Public Utilities Board to provide a spinning reserve of 300MW.

This, he said, would only be in the form of reserves for which TNB would have to pay.

"The ministry and TNB would also discuss with the Thai Government and its utilities authority for additional power supply," he added.

Malaysia now receives 40MW of electricity under the Asean power exchange plan.

Samy Vellu said the recent spate of power disruptions due to load shedding was unavoidable as some of the turbines had to be rested for regular servicing or repairs.

"This resulted in the loss of some 1,034MW of electricity which could have been generated. I have instructed TNB to speed up repairs and put

more personnel to work."

The turbines under repair were at Port Dickson, Pasir Gudang, Prai, Connaught Bridge, Paka, Glugor, Sungai Woh and Jorin in Cameron Highlands.

"We expect to get back some 200MW of power when repairs and servicing are ready in two weeks," he said.

Samy Vellu also said TNB was discussing with the Factory and Machinery Department to continue generating power in March as the shutting down of three turbines for servicing would reduce power by 500MW.

Currently, the electricity capacity being generated stood at 5,560MW while maximum demand was at 4,600MW.

Other power projects in the pipeline are in Malacca (2 x 110MW) to be ready by December or January next year and Serdang (5 x 110MW) to be ready in phases starting May next year.

Federal Power projects RM200m turnover this year

STAR
20 JAN 1993

FEDERAL Power Sdn Bhd is projecting a turnover of RM200 million this year, up 24 per cent from RM161 million last year, with the increase in output from its new RM42.4 million plant.

The new plant will produce 2,000km of cross linked polyethylene or XLPE insulated cables, raising total annual production of power cables to 5,000km from 3,000km previously.

With the increased production to international standards, the company hoped to begin exporting its power cables, said chairman Tan Sri Abu Zarim Haji Omar at the factory opening in Shah Alam yesterday.

"We are participating in several international tenders including in Brunei, Sudan and Bangladesh and hope to break into any of these markets," he said.

The company currently enjoys between 30 and 40 per cent of the domestic power cables market, valued at RM800 million.

Abu Zarim said its main customer was Tenaga Nasional Bhd, which until the last few years, accounted for 90 per cent of its total turnover.

One of the original three joint venture partners of Federal Power, Tenaga Nasional now accounts for 80 per cent of the company's total turnover.

Another 20 per cent is attributed to the Sarawak Electricity Supply Corporation, contractors, wholesalers and developers.

On its contracts with Tenaga Nasional, Abu Zarim said these were normally over a two-year period, and there were several contracts running at any one time.

"We have been trying for some time to push for longer term contracts but have not come to an agreement on the matter," he said.

Incorporated in 1974 as Federal Power & Telecoms Sdn Bhd, the company pioneered the manufacture of power cables and wires in Malaysia.

Penduduk merungut bekalan elektrik putus

UM
20 JAN 1993

Saudara Pengarang,

SAYA sebagai penduduk Kampung Tersusun Tasek Ipoh, dukacita kerana bekalan elektrik ke kampung kami dan juga di kawasan sekitar Bercham, Ipoh selalu sahaja terputus empat atau lima kali sebulan.

Setiap kali tenaga elektrik terputus, kami akan menghubungi Tenaga Nasional Berhad Tanjung Rambutan. Jawapan yang

kami dapat hanya, "bersabarlah, kami sudah pun menghantar pekerja untuk membaikinya". Tetapi yang ternyata keadaan tergendala itu memakan masa lama antara empat hingga lima jam dan ada kalanya melebihi 24 jam.

Kejadian terbaru berlaku pada 1 Januari lalu di mana pada pukul 2.30 petang bekalan elektrik terputus semasa cuaca baik. Apabila kami menghubungi TNB Tanjung

Rambutan apa yang kami dapat hanyalah nada pakai.

Bekalan elektrik kami pulih pada pukul 3.30 petang keesokannya. Ini bermakna kami terpaksa bergelap dan berpanas selama 24 jam.

Apakah ini yang dinamakan khidmat yang baik? Sering saja terputus bekalan elektriknya.

Pada pendapat kami penswastan LLN hanya-

lah memberi keuntungan segera kepada kakitangan TNB. Tetapi kami juga tidak salah menimbulkan pertanyaan: Apa faedah penswastan LLN bagi kami penduduk Kampung Tersusun Tasek? Mungkinkah taraf elektrik akan diturunkan? Tidak juga. Boleh dikatakan saban bulan bil elektrik bagi kawasan kami semakin tinggi. —
PENDUDUK KECEWA, Ipoh, Perak.

Ani: Quality workforce vital for success

JOHOR BARU: A quality workforce will be the competitive edge to the nation's aim of becoming developed by 2020, said Tenaga Nasional executive chairman Tan Sri Dr Ani Arope.

However, Dr Ani added the number of trained professionals in the labour force was still low and more effort should be made to train them to meet the demand.

"For a country which is poised to enter the rank of a developed country, the number (of professionals) is low and this is a cause for alarm.

"Countries such as Japan, Taiwan and South Korea have the right size of university population to meet the demand for the future.

"If we intend to move from labour intensive to skill and knowledge-intensive, we need to re-assess our educational sys-

tem," he said in his paper *Professional Workforce, Challenges of Vision 2020* at the Industrialisation and Human Resources Development conference at the Universiti Teknologi Malaysia here yesterday.

Dr Ani said there was a need to increase the number of university places or their equivalent to produce more graduates annually.

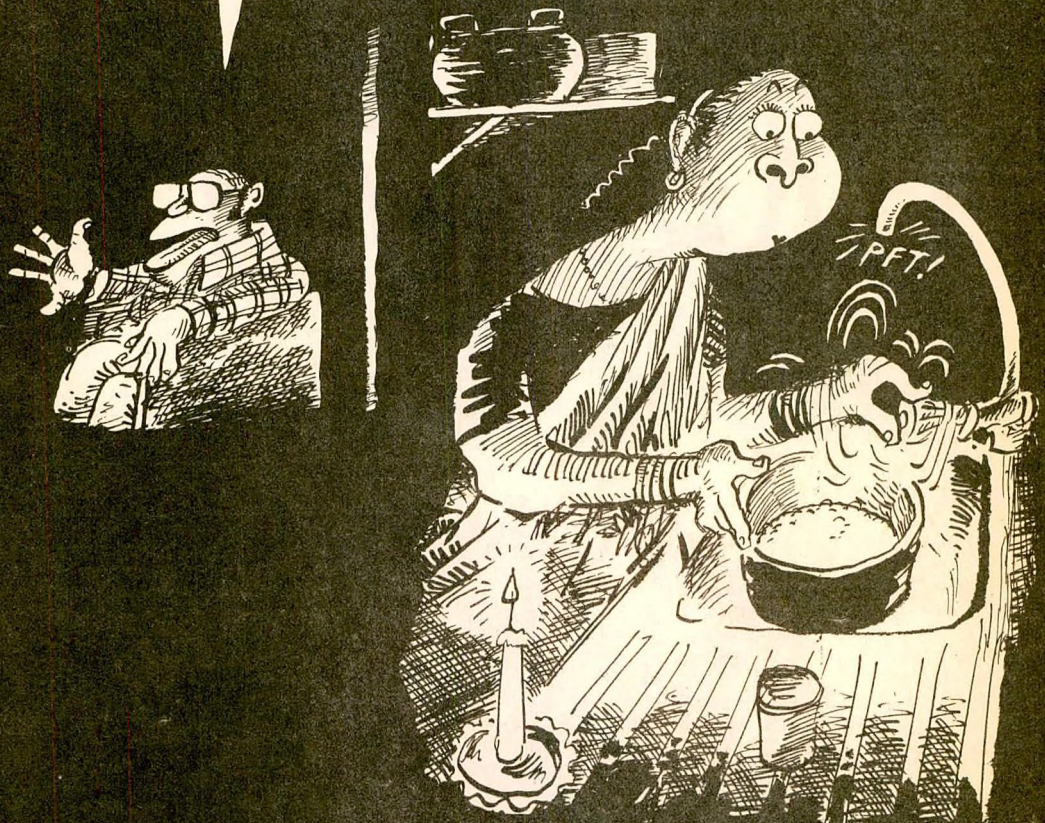
"If we fail to take the opportunity to train our youths, the generation will be left behind," he said.

He also said the present professional workforce must constantly upgrade their skills.

"The changing trend in the economic, socio-political, cultural and technological arena demands greater competence in terms of technical and management proficiency," he said.

Scenes of Malaysian Life by L.A.T.

What to do sometimes there's power failure...?
We should be thankful our water supply
is all right...!



Tenaga: Enough power by March

By ZUBER IBRAHIM and
FOO YEE PING

KUALA LUMPUR: Tenaga Nasional Berhad said it will be able to produce enough power for the country's needs by March when repairs on generators are completed.

The corporation, which has come under heavy criticism for frequent blackouts and the present peninsula-wide load-shedding, said yesterday it would submit a comprehensive report on the situation to the Government.

In a statement, Tenaga said efforts were being made to reduce the frequency of disruptions to all sectors of consumers.

Repairs and maintenance works to improve the situation would be carried out over the Chi-

nese New Year period.

At present, the electricity capacity being generated stood at 5,560 MW while maximum demand was at 4,600 MW, it said.

"However, the scenario will change if suddenly the generators at the power stations are found in need of repair.

"Now nine sets of generators with capacity to generate 787 MW of power are being repaired due to damage, undergoing regular maintenance works and also because of conversion to gas," the statement added.

Tenaga was confident when all these works were completed by March, it would be able to generate more power to meet demand.

In addition, Tenaga was also taking steps to build

several power stations and install more generators.

The projects are the Sungai Piah hydro station (55 MW) to be ready by March and installing additional turbines (10 x 30 MW) to be ready by August or September.

Other projects in the pipeline are the Malacca power station (2x110 MW) to be ready by December or January next year, the Serdang power station (5x110 MW) to be ready in phases starting May next year and the Pergau power station (4x150 MW) expected to be ready by 1996.

These projects do not include others already approved by the Government for implementation

● TURN TO PAGE 3

30,700

KUALA LUMPUR: The Housing and Local Government Minister is very satisfied with the Royal Commission of Inquiry's report on the Bright Sparks fireworks tragedy. Datuk Dr Ting Chew Peh said yesterday the Government would study the report's recommendation before taking further action.

The Sungai Buloh tragedy on May 7 claimed 22 lives and injured 103. A victim is still missing and eight bags of remains have not been identified. Dr Ting said copies of the report, which he received from commission chairman and High Court Judge Datuk Wan Adnan Wan Ismail at his ministry, would be distributed to Cabinet members by the end of the month.

Also present were panel members Datuk Dr Chai Choon Chai, secretary for Singh, engineer Tin Haji Abdul Latib Omar and ministry secretary-general Datuk Ahmad Hassan Osman.

Dr Ting added that 129 witnesses testified at the 65-day public hearing in 1991 and 1992.

He added that the authorities would investigate further the claims that explosives were still buried at the site.

Scenes of Malaysian Life by L.A.T.



Nine Tenaga power plants out of operation temporarily

By Sabri Said and
M. Sahibullah

KUALA LUMPUR, Fri. — Nine of Tenaga Nasional Berhad's power generating plants, with a combined capacity of 787 megawatts, are out of operation.

This is one of the factors behind the present power supply disruptions.

In a statement today, Tenaga Nasional said the plants were either undergoing normal maintenance, being repaired or were being converted to gas-fired units.

Even though Tenaga Nasional's present generating capacity of 5,560 megawatts is more than the existing demand of 4,600 megawatts, the statement said the situation might change if unexpected breakdowns occurred at any of its remaining plants.

The statement said the company would submit a

comprehensive report on the power supply disruptions to the Government.

In the meantime, it has taken steps to minimise breakdowns.

It will continue to carry out restoration work during the Chinese New Year holidays to improve the situation.

The restoration work is expected to be completed by March.

To accommodate the expected increase in demand, Tenaga Nasional is setting up several new power plants and facilities to increase capacity.

These include the 55-megawatt Sungai Piah hydro-electric station which is expected to be ready by March, 10 additional units of 30-megawatt gas turbines to be ready by August and September, the 220-megawatt Malacca power station to be ready by January next year, the 550-megawatt Ser-

dang power station to come on-line by May next year and the 600-megawatt Pergau power station which will be ready by 1996.

In Penang, manufacturers said they might demand compensation from Tenaga Nasional for the losses caused by breakdowns and disruptions in the supply of electricity.

The chairman of the Federation of Malaysian Manufacturers (FMM) for the northern region, Mr O.K. Lee, said this was to help them recover some of the losses incurred during the breakdowns.

However, he said that manufacturers might only resort to such an action if the breakdowns were too frequent or lasted too long.

He said there had been a "worrying" increase in the numbers of breakdown in electricity supply, especially in some of the industrial estates in the north.

"In fact, there were more disruptions and breakdowns over the last few months than in the whole of 1991," he said.

The blackouts had not only disrupted the operations of the factories but also caused embarrassment when foreign investors happened to be visiting them.

"If the breakdowns are not checked, foreign investors may gradually lose their confidence in our investment climate."

Responding to International Trade and Industry Minister Datuk Seri Rafidah Aziz's call to Tenaga Nasional to buck up, Lee said one way of ensuring it would comply was to allow another power supply company to be set up.

"Having a rival company will spur Tenaga Nasional to improve its performance as competition usually results in improvement," Lee said.

NST 16.1.93

Menangk s panahan petir

GANGGUAN akibat petir, terutama di kawasan penting seperti loji carigali minyak, radar, satelit, pencawang elektrik dan bangunan utama boleh menyebabkan banyak kerja tergendala.

Sehubungan itu, Syarikat Lightning Eliminator & Consultants Inc dari Amerika Syarikat menjalankan pelbagai penyelidikan bagi mencipta peralatan yang dapat melindungi dan mencegah bangunan, radar, loji, pencawang serta menara elektrik daripada panahan petir.

Jurutera Perunding syarikat itu, Roy B Carpenter, berkata syarikat berkenaan sudah menjalankan penyelidikan sekian lama untuk mengatasi masalah yang disebabkan oleh panahan petir.

Syarikat berpangkalan di Colorado, Amerika Syarikat itu akhirnya berjaya mencipta pelbagai alat untuk melindungi dan mencegah sesuatu binaan yang sering terdedah kepada panahan petir, termasuk alat yang dapat meramalakan kejadian ribut petir bagi memberi amaran awal dan seterusnya mengelakkan kemungkinan berlakunya bahaya.

Dissipation Array System (DAS) adalah salah satu alat ciptaan mereka dan digunakan secara meluas di seluruh dunia.

Konsep asas penggunaan sistem berkenaan adalah sama. Yang berbeza cuma di segi bentuknya, iaitu mengikut keperluan sesuatu bangunan, menara atau apa sahaja yang patut dilindungi.

Menurut Carpenter, sistem itu dapat mencegah kerosakan besar seperti yang berlaku di stesen janakuasa Tenaga Elektrik di Paksa, Terengganu 29 September lalu, mengakibatkan bekalan elektrik terputus di seluruh Semenanjung.

(Salah satu puncanya dikatakan daripada ribut petir, menyebabkan empat talian elektrik di pusat penyaluran Teluk Kalong, Kemaman, Terengganu terpelantik. Talian berkuasa 275 kilovolt (kv) itu bersambung ke Stesen Janakuasa Elektrik Paksa, Kemaman dan dari situ ia bersambung ke hampir semua stesen janakuasa di



PERNAHKAH keasyikan kita menonton televisyen diganggu oleh bekalan tenaga elektrik yang tiba-tiba terputus? Atau dentuman petir menjejaskan siaran rancangan kegemaran kita? Bahkan kadangkala ribut petir juga mengganggu urusan lalu-laluan di lapangan terbang. Biasanya panahan petir pertama adalah paling berbahaya.

Masalah gangguan ini sering berlaku setiap kali ribut petir melanda. Ia bukan saja mendatangkan kerosakan besar, tetapi turut membabitkan kerugian berjuta ringgit.

Permasalahan itu sudah lama diketahui, bagaimanapun tidak ada tindakan atau penggunaan peralatan yang sesuai untuk menghadapi bencana berkenaan. Bagaimanapun, sebuah syarikat asing berjaya menemui alat khas yang dapat membantu mencegah kejadian itu, dikenali sebagai Dissipation Array System.



ROY B CARPENTER ...jurutera perunding

Wartawan *Berita Teknologi*, RIDZUAN YOP menemubual jurutera dari Amerika Syarikat yang terbabit dalam pengendalian alat berkenaan untuk mengetahui pengendalian dan keberkesananannya.

seluruh negara).

DAS diperkenalkan pada 1971 di Amerika dan ia satu-satunya alat yang dapat menjamin perlindungan sepenuhnya. Ia digunakan untuk melindungi pelbagai kemudahan yang sering terdedah kepada panahan petir dalam lingkungan keluasan tiga kilometer persegi dan ketinggian sehingga 518 meter.

Sistem itu mengandungi tiga pecahan sistem iaitu, ionizer (sebagai alat pantulan petir), Pengumpul Arus Elektrik Dasar (Ground Current Collector - GCC) dan Interconnecting Charge Conductors (ICC).

Alat GCC berfungsi sebagai pengumpul cas pada kawasan yang dilanda ribut petir manakala ICC akan menyediakan ruang pengaliran arus elektrik berkenaan dari bumi ke Ionizer bagi mengurangkan tenaga berlebihan yang dihasilkan.

Katanya, Ionizer adalah alat pecahan sistem yang terawal berfungsi dalam DAS untuk mengurangkan



KAWASAN radar turut menjadi sasaran petir dan pembinaan DAS sangat penting di situ.

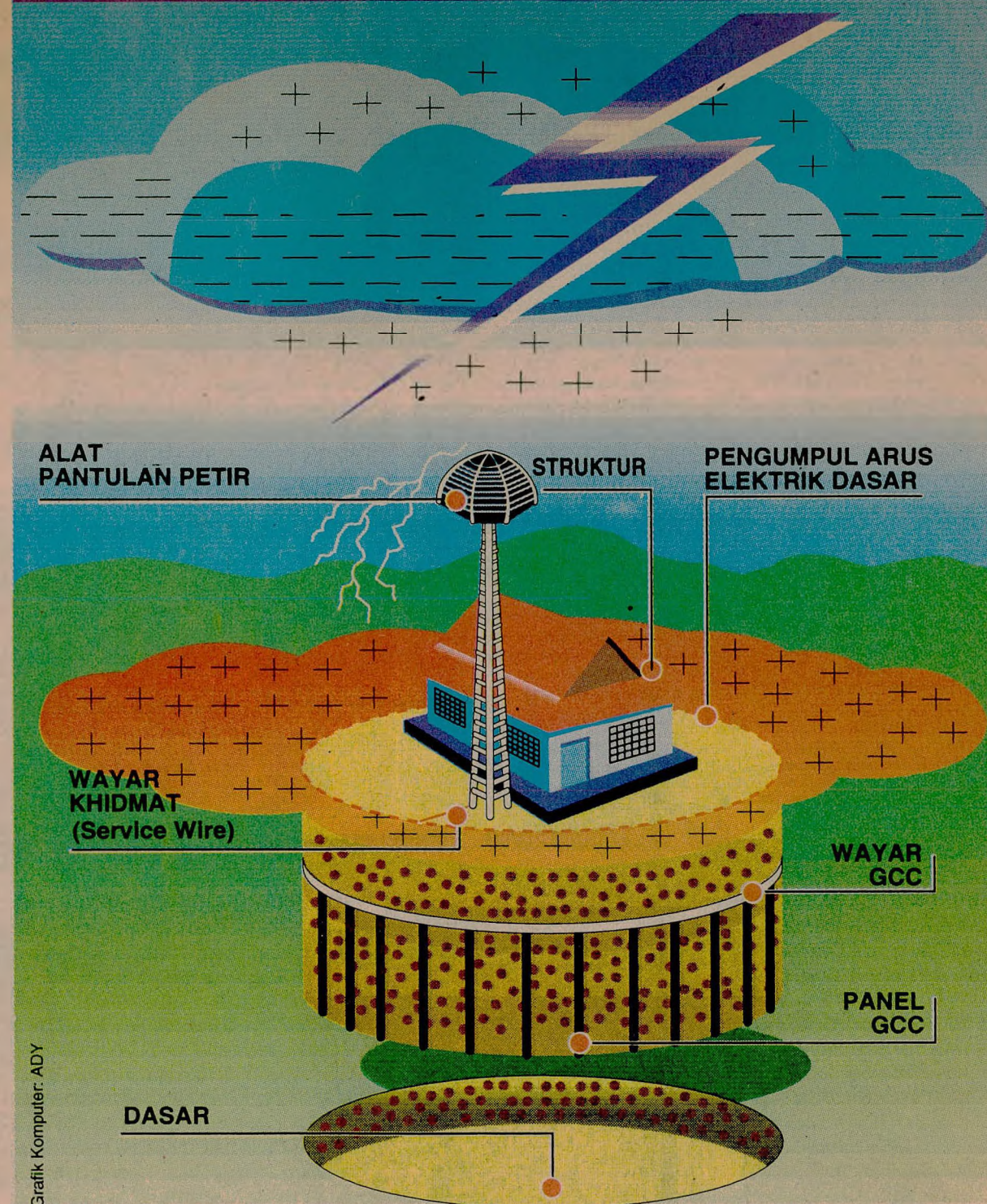
tenaga yang terkumpul. Ionizer direka berdasarkan prinsip elektrostatik dipanggil *Point Discharge*.

(*Point Discharge* wujud akibat molekul udara mengambil arus elektrik daripada kawasan yang mene-

rima paling banyak panahan petir.)

"Apabila arus elektrik berada antara kawasan elektrostatik, Ionizer mampu menerima tenaga lebih 10,000 volt bagi mengurangkan risiko kerosakan.

KONSEP SISTEM ALAT PANTULAN PETIR



Grafik Komputer: ADY

"Pada masa yang sama, apabila pengionan berlaku akan mewujudkan satu proses aliran arus dari kawasan yang menerima petir ke udara untuk menyebarkan tenaga berlebihan yang tidak diperlukan.

"Dalam keadaan ribut petir, proses pengionan akan meningkat dan boleh mencapai sehingga 30,000 volt," jelas Carpenter.

Ionizer direkabentuk mengikut ukuran parameter, sama ada bagi menentukan angka dalam unit, ketinggian atau ruang pada kawasan yang dilindungi. Ia berupaya menentukan jumlah pengeluaran ion yang akan dihasilkan pada kawasan yang terbabit.

Berikutan itu, ia boleh melindungi arus elektrik yang dihasilkan dalam kawasan kira-kira 3,600 meter persegi, di samping mampu mengeluarkan purata 15 miliampere kuasa pelindung ketika ribut petir berlaku.

DAS juga berupaya bertindak sebagai mekanisme yang dapat berfungsi untuk menghasilkan sistem pelindung di kawasan yang menerima arus elektrik dengan pantas.

Sistem itu juga menyediakan *space charge* sebagai pusat pengumpulan ion, yang terletak di antara tapak yang dilindungi dan kawasan sel. Ia bertindak sebagai pelindung

atau dipanggil *Faraday Shield* bagi mengurangkan aliran tenaga elektrik di antara bumi dan langit.

Ada beberapa jenis pelindung digunakan dalam DAS, antaranya jenis Hemisphere yang berbentuk seperti payung dan berupaya bertindak sebagai pemantul tenaga elektrik yang dihasilkan oleh petir.

Biasanya alat jenis itu digunakan untuk melindungi menara sehingga mencapai ketinggian lebih 100 meter, misalnya tangki, bangunan, substesen, menara air, radar dan pelapis pelancar peluru berpandu.

Sejenis lagi alat lain yang dicipta oleh syarikat itu ialah alat yang dapat

memberi amaran dan meramalkan bila berlakunya ribut petir dan taufan serta kadar elektrostatik tinggi.

Alat yang dipanggil Sistem Amaran Ribut itu mampu mengesan lokasi dan mengenal pasti kejadian melalui sistem gerakan elektromagnet dan elektrostatik yang dihasilkan pada alat berkenaan.

Ia akan berfungsi selepas butiran data mengenai dinyatakan kerana petir akan membentuk elektrostatik. Oleh itu, peningkatan dalam pergerakan elektrostatik, dapat mengesan dan menunjukkan arah di mana berlakunya ribut petir.

BUCK UP TENAGA

Order follows frequent blackouts

By ZULKIFLY MOHAMAD

PENANG: The Government has told Tenaga Nasional Berhad to buck up following widespread power breakdowns.

International Trade and Industry Minister Datuk Seri Rafidah Aziz said yesterday Tenaga's performance was not up to the mark despite being a privatised company.

She added that the problem was "rampant" as her ministry had received feedback from industries complaining about frequent interruptions which had caused them heavy losses.

"In some areas, power cuts are almost a daily occurrence and the Government is viewing this with great concern," she said after opening a factory.

"The Government has directed Tenaga to buck up and prepare an immediate strategic plan to overcome the problem.

"We also want Tenaga to submit a report on incidences of electricity interruptions over the past few months."

Rafidah said the directive was issued after

the problem was highlighted during the last Cabinet meeting.

She added that the Government would not tolerate this any longer as it would defeat the purpose of providing a competitive edge for the manufacturing sector.

The Government also ordered Tenaga to provide a separate focus for industrial consumers due to their advanced technology.

It was, therefore, vital for suppliers of basic amenities such as Tenaga and the water authority to forge closer rapport with industry so that they knew their requirements.

Meanwhile, Chief Minister Dr Koh Tsu Koon said the state government fully supported Rafidah's call to Tenaga to buck up.

He said the problem had been very bad during the last two days, especially in the Prai Industrial Estate.

"We have received complaints of power cuts affecting factories in a certain area.

"However, there was an incident when the whole of Bayan Lepas Free Trade Zone suffered a blackout," he said.

He hoped Tenaga would plan ahead to ensure sufficient electricity supply for the industries.

TNB diarah atasi gangguan

Oleh Ahmad Shuhaimi Zabri

GEORGETOWN, Khamis — Kabinet mengarahkan Tenaga Nasional Berhad (TNB) menyediakan laporan lengkap mengenai gangguan bekalan elektrik di beberapa tempat, khususnya di sektor pembuatan, sejak beberapa bulan lalu.

Menteri Perdagangan Antarabangsa dan Industri, Datuk Seri Rafidah Aziz, berkata Kabinet ingin tahu punca sebenar masalah itu.

Katanya, Kabinet dalam mesyuaratnya semalam juga mengarahkan TNB mengambil segala langkah mengatasinya serta memberi tumpuan khas kepada sektor industri dalam perancangannya mengatasi kekerapan putusannya bekalan elektrik.

"Kabinet tidak boleh bertolak ansur dalam hal ini kerana ia mengganggu operasi seharian sektor pembuatan.

"TNB harus mengeluarkan

program khusus dan berkesan untuk mengatasi masalah itu," katanya kepada pemberita selepas merasmikan pembukaan kilang Toray Plastic (M) Sdn Bhd di sini, hari ini.

Rafidah berkata, sejak kebelakangan ini, kerajaan khususnya kementeriannya menerima banyak aduan industri mengenai putusannya bekalan elektrik ke kilang sehingga menyebabkan kerugian besar.

"Dalam beberapa kes, kami dapati gangguan bekalan elektrik berlaku setiap hari. Walaupun gangguan hanya seketika, tetapi apabila kejadian itu kerap berlaku, ia menimbulkan kemarahan dan rasa tidak puas hati industri.

"Ini kerana kita sepatutnya menyediakan suasan menarik kepada sektor pembuatan sebagai tarikan pelaburan. Jika gangguan bekalan elektrik terus berlaku, ia ada-

lah sesuatu yang merugikan.

"Pelabur akan berfikir panjang sebelum melabur di negara ini kerana gangguan yang berlaku mendatangkan kesan sampingan yang ketara kepada industri, khususnya kepada perolehannya," katanya.

Rafidah berkata, Kabinet juga mengarahkan TNB memberikan tumpuan khusus kepada sektor pembuatan kerana ia kini berkembang di segi peralatan dan teknologinya.

Sehubungan itu, kakitangan TNB di bahagian penjagaan dan pembaikan harus peka kepada peralatan dan teknologi terkini yang digunakan industri.

"Hubungan rapat harus wujud di antara TNB dan industri. Pengetahuan luas mengenai peralatan dan teknologi industri memudahkan lagi kerja penjagaan dan pembai-



RAFIDAH AZIZ
... program khusus

kan TNB," katanya.

Rafidah berkata, TNB sebagai badan swasta yang mampu mencatatkan keuntungan membe-rangsangkan setiap tahun, seharusnya tidak menghadapi masalah mengatasi gangguan itu.

Sementara itu, Ketua Menteri, Dr Koh Tsu Koon, berkata kerajaan negeri banyak menerima aduan sejak dua hari lalu mengenai gangguan bekalan elektrik di beberapa zon dan taman perindustrian.

"Gangguan kerap berlaku di taman perindustrian Prai. Masalah ini harus diselesaikan segera dan TNB perlu mengambil langkah lebih konkrit dalam mengatasinya," katanya.

Menurutnya, TNB perlu membuat perancangan jangka panjang dalam penyediaan bekalan elektrik, khususnya ke kawasan industri yang berkembang pesat.

COMPANIES

Malaysian companies to benefit from TQM

MALAYSIAN companies are poised to benefit from implementing Total Quality Management (TQM) practices since they are located in a fast developing growth area in the world.

Mr Steven M. Hronec, an Arthur Anderson Worldwide partner, said that it is easier for up and coming companies to implement TQM compared with matured ones which are facing declining market shares.

"To enable Malaysian companies to penetrate and survive in the international market, they need to move to quality. International business is very competitive and there is tremendous pressure for companies to come out with products that meets the specifications of consumers," he told Business Times in Kuala Lumpur recently.

Hronec who is visiting Malaysia and Singapore to meet and advise large corporations, has an extensive involvement in the manufacturing sector and hands on experience in a number of TQM projects.

His list of clients include Motorola, General Motors, Miller Corporation (previous winner of the Malcom Baldrige National Quality Award in US) and other Fortune 500 corporations.

He said that the Malaysian drive towards TQM is largely motivated by the Government.

"Malaysian companies are also working hard towards getting quality certification for their products like the ISO9000," he further elaborated said.

To ensure the successful implementation of TQM, there must be a constant

quest to upgrade technology and training standards.

However, Hronec warned that Malaysian companies should not wait too long before making their move into the regional and international market.

He feels that the opportunity to make a mark internationally especially in the Asia Pacific region is for a limited time only.

The Japanese have been successful in implementing TQM since it was started in the country very early.

Japan implemented TQM practices as far back as the 1950s when they realised that they could not survive without it.

According to him, to implement any successful change towards TQM, 95 per cent of the effort should be focused on the organisation's people.

The focus translates into helping people become aware of what the ramifications of the change is and why it is important to change.

In instances where TQM projects have been unsuccessfully implemented, it is usually explained that the system "implemented" was technically sound, however not used in the way that it was designed.

The major complaint of top management is that although the team that installed the system was technically competent, it did not take care of the "people" issues.

The introduction of TQM requires changes in the organisational culture, strategies, goals, processes, managerial attitudes, skills, performance measures and appraisal systems.



□ HRONEC... need to move to quality

Malaysian

Business

15.1.93

NSI 15.1.93

Pay attention to factories, Tenaga told

By Michael Lai

PENANG, Thurs. — The Cabinet has directed Tenaga Nasional Berhad to pay specific attention to the industrial sector in its plans to minimise breakdowns in power supply.

Minister of International Trade and Industry (Miti), Datuk Seri Rafidah Aziz said Tenaga, being a private enterprise with impressive profits, should have no excuse in finding counter-measures to this problem.

She said the Ministry had received an "intolerable" number of complaints on the frequency of power breakdowns.

"At its meeting yesterday, the Cabinet directed Tenaga to ensure that power supply to the industrial sector is uninterrupted," she told reporters after opening Toray Plastics (M) Sdn Bhd plant.

"These breakdowns occur almost daily in some areas. Although they may be

short, they are constant irritants to the industrialists and cost them millions of ringgit in loss of revenue."

Rafidah said it was imperative to protect the industries' interest in order to maintain Malaysia's competitive edge as an attractive investment base for multinational corporations.

Tenaga, she added, was ordered to provide specific and "implementable" preventive programmes.

Tenaga was also asked to keep up with the latest hi-tech equipment used by the industries so that its maintenance staff could react quickly during a breakdown, Rafidah said.

Asked to comment on Tenaga's performance, she said: "Their current performance is not up to the mark and the Government cannot tolerate any future breakdowns."

A day-long nationwide blackout on Sep 30 last year caused chaos and crippled

the economic activity, including the industrial sector's operations.

The massive power loss was blamed on lightning, which damaged the Telok Kalong sub-station in Kemaman, Terengganu.

Chief Minister Dr Koh Tsu Koon disclosed that parts of the industrial estates in Prai and Bayan Lepas here faced a breakdown in power supply over the past two days.

Koh, who also attended the opening ceremony, said the breakdowns were related to "load-shedding".

"The State Government had a dialogue with the industrialists on Tuesday and they hope that Tenaga will improve their performance," he said.

While supporting the Government in its directive to Tenaga, he said the corporation should consider the rate of expansion of the industries by providing sufficient electricity.

UTUSAN MALAYSIA 15.1.93

Kabinet arah TNB atasi masalah

PULAU PINANG 14 Jan.

— Kabinet telah mengarahkan Tenaga Nasional Berhad (TNB) mengambil langkah-langkah tertentu untuk mengatasi masalah gangguan bekalan elektrik yang sering berlaku di negara ini.

Menteri Perdagangan Antarabangsa dan Industri, Dato' Sri Rafidah Aziz berkata, mesyuarat kabinet semalam juga mahu TNB memberi laporan lengkap berhubung kes-kes gangguan bekalan

elektrik yang menjejaskan sektor perindustrian di negara ini.

"Kerajaan memberi jaminan untuk memberi perhatian serius terhadap masalah gangguan bekalan elektrik ini," katanya semasa berucap merasmikan kilang Toray Plastics Malaysia Sdn. Bhd. di sebuah hotel di sini hari ini.

"Kerajaan berharap TNB dapat memastikan bekalan elektrik tidak lagi terganggu," katanya.

Gangguan elektrik akibat kerosakan kabel pencawang — TNB

Saudara Pengarang,

ADUAN "elektrik dua hari seminggu" oleh Nor Khadijah Kassim dari Keruh, yang disiarkan dalam ruangan ini pada hari Jumaat, 4 Disember lalu, adalah dirujuk.

TNB mengucapkan terima kasih kepada beliau di atas perkara yang dibangkitkan dan bersimpati sangat terhadap masalah yang dihadapi olehnya ekoran masalah tersebut.

Untuk pengetahuan aduan, daerah Pengkalan Hulu menerima bekalan elektrik melalui kabel dari Pencawang Masuk Utama (PMU) Baling.

Mengikut daftar kerosakan di TNB Baling, gangguan bekalan elektrik yang melibatkan daerah Pengkalan Hulu adalah lebih kerap sekitar bulan November tahun lepas sahaja.

Setelah dikenalpasti, didapati kekerapan gangguan adalah berpunca daripada kerosakan kabel voltan tinggi di antara Baling dan Pengkalan Hulu.

Pihak TNB Baling telahpun menukarkan kabel berkenaan dengan kabel baru. — **NIK NAJIHAH NIK AHMAD, b.p. Pengurus Perhubungan Korporat, Tenaga Nasional Berhad.**

Kerosakan akibat gangguan bekalan ^{um} elektrik 11/1/93

Saudara Pengarang,

ADUAN 'Penduduk Pahang Tua Kecewa Dengan TNB' oleh Iskandar Zulkarnain yang disiarkan dalam ruangan ini 10 Disember lalu adalah dirujuk.

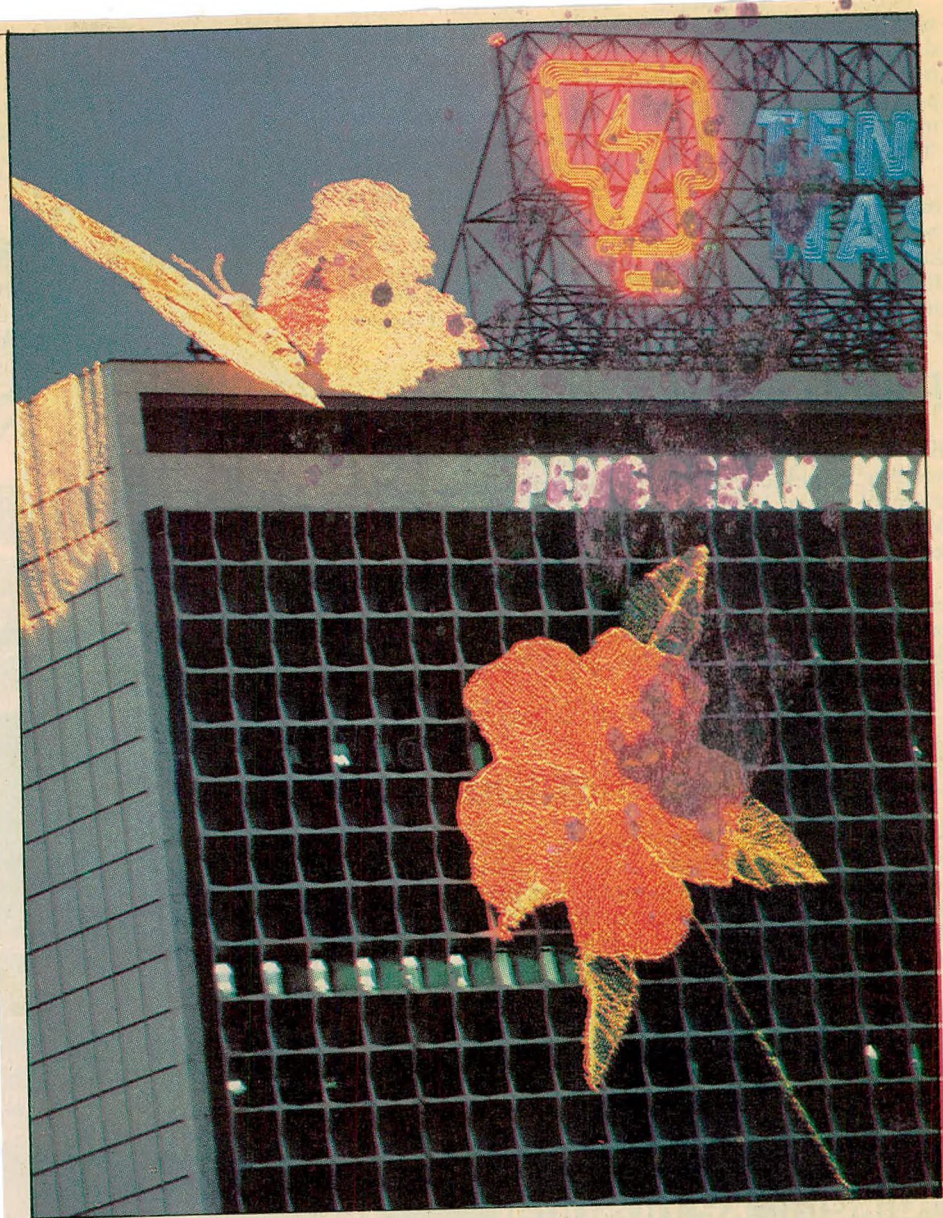
Tenaga Nasional Berhad mengucapkan terima kasih kepada beliau di atas perkara yang dibangkitkan dan bersimpati terhadap masalah yang dihadapi.

Sekitar bulan November tahun lepas, terdapat beberapa kerosakan pada sistem pembahagian Tenaga Nasional yang menyebabkan gangguan bekalan di Kampung Pahang Tua. Setelah dikenalpasti, adalah didapati kebanyakan kerosakan berpunca daripada gangguan pokok-pokok pada talian sesalur atas voltan rendah yang berlaku terutamanya pada musim tengkujuh.

Mengikut daftar kerosakan di Tenaga Nasional, Pekan, gangguan bekalan pada pagi 8 November 1992 di Kampung Pekan Tua adalah disebabkan oleh fuis yang terbakar. Walau bagaimanapun, fuis tersebut telahpun diganti dan bekalan telah dipulihkan dalam masa dua jam. Selepas itu, tiada lagi aduan diterima pada hari tersebut.

Segala kesulitan yang dialami oleh penduduk Kampung Pahang Tua semasa gangguan bekalan tempoh hari amatlah dikesali.

— **NIK NAJIHAH NIK AHMAD, b.p. Pengurus Perhubungan Korporat, Tenaga Nasional Berhad.**



KUPU-kupu replika di Ibu Pejabat Tenaga Nasional di Kuala Lumpur.

Kupu-kupu raksasa di TNB UTM 12/1/93

KUALA LUMPUR 11 Jan.— Bangunan Ibu pejabat Tenaga Nasional Berhad (TNB) dihinggapi kupu-kupu gergasi?.

Tidak! sebenarnya, ia hanyalah satu replika seekor kupu-kupu berukuran 13 meter tinggi dan 13 meter lebar yang

dipasang di atas bumbung bangunan itu sejak September tahun lepas sempena Pesta Malaysia 1992.

Turut dipasang pada bangunan itu ialah replika raksasa sekuntum bunga raya.

Walaupun pesta itu te-

lah berlalu, pengurusan TNB masih mengekalkan kedua-dua replika itu yang dihiasi lampu berwarna-warni bagi mengindahkan lagi pemandangan bangunan itu, terutama pada waktu malam. — Gambar Bernama.

TNB jamin bekalan elektrik lancar

7/1/93

JASIN, Khamis — Tenaga Nasional Berhad (TNB) memberi jaminan bekalan tenaga elektrik di kawasan Melaka Tengah tidak akan terganggu disebabkan penggunaan yang bertambah sepanjang Pesta Dekorasi Tahun Baru Cina selama sebulan.

Pengerusi Sumber Manusia dan Kesihatan, Datuk Gan Boon Leong, berkata beliau mendapat jaminan Pengurus Daerah Kanan TNB, Mohd Sidek Ahmad mengenai perkara itu.

Sehubungan itu, Gan menafikan dakwaan DAP bahawa kawasan Melaka Tengah akan bergelap sekiranya pesta itu yang dijadualkan bermula esok hingga 7 Februari, diteruskan.

Menurut Gan, kira-kira RM350,000 dibelanjakan untuk pesta itu termasuk hiasan di jalan raya.

Mesyuarat bincang gangguan elektrik di kawasan industri

7/1/93
IPOH, Khamis — Gangguan bekalan elektrik yang sering berlaku di beberapa kawasan perindustrian di negeri ini akan dibincangkan di Mesyuarat Penyelarasan Pembangunan Industri pada 20 Januari ini untuk diambil tindakan.

Pengerusi Hal-Ehwal Industri, Perbadanan Awam, Kebudayaan dan Pelancongan Perak, Datuk Junus Wahid, berkata masalah bekalan elektrik yang sering terputus di kawasan perindustrian tidak boleh dipandang mudah kerana ia akan membantutkan usaha kerajaan negeri menarik lebih ramai pelabur asing, khususnya yang berteknologi tinggi dan intensif modal ke negeri ini.

"Kita akan meminta Tenaga Nasional Berhad (TNB) supaya menghantar laporan lengkap mengenai kejadian itu kerana dengan cara itu ia akan memudahkan kerajaan negeri merancang tindakan bagi mengatasi

masalah itu," katanya ketika dihubungi *Berita Harian* di sini, hari ini.

Menurutnya, kerajaan negeri memerlukan laporan itu kerana melalui cara itu, punca gangguan bekalan elektrik dapat dikenal pasti dan memudahkan kerajaan mengambil sebarang tindakan untuk memperbaikinya.

Katanya, jika tindakan segera tidak diambil, kerugian yang dialami oleh pekilang di kawasan terbabit akan meningkat sehingga memaksa mereka mengalihkan pelaburan ke negeri lain.

Junus berkata, sebelum ini TNB sudah lama memberi jaminan kepada kerajaan untuk menyelesaikan masalah itu dengan segera tetapi sehingga kini masalah itu masih belum dapat diatasi.

Antara kawasan perindustrian yang sering terputus bekalan elektrik ialah Silibin, Tasik dan Jelapang.

Firms post impressive profits of \$16.29bn

By E. GANESALINGAM

COMPANIES listed on the Kuala Lumpur Stock Exchange have announced an impressive \$16.29 billion in pre-tax profits in 1992 against \$12.14 billion a year before, the Malaysian Investors' Association (MIA) said.

MIA, in its report on prospects of the Malaysian and Singapore stock markets for 1993, said this is based on those results which have been released from January 1 to December 31 1992.

Of the total pre-tax profits announced during this period, 58.9 per cent or \$9.6 billion were contributed by the top 30 companies.

Heavyweight Tenaga Nasional was ranked number one with a pre-tax profit of \$1.41 billion, followed by Telekom Malaysia with \$1.08

billion, and Sime Darby with \$755 million.

However, it should be noted that the top performer in the Malaysian corporate scene in terms of profit is the Petronas Group which is not listed.

MIA noted that it was the first time that the pre-tax profit of a listed company breached the billion ringgit level.

The banking sector performed well with Malayan Banking making \$560 million, Arab-Malaysian Merchant Bank group (\$167 million), Public Bank (\$165 million) and MBf Finance (\$133 million), making it to the top 30.

Malaysian International Shipping Corp (MISC), the sole shipping counter on the KLSE, recorded a pre-tax profit of \$556 million.

Buoyed by the strong con-

sumer demand of a robust economy of 8.7 per cent real Gross Domestic Product growth for 1992, and 8.9 per cent in 1991, the car industry put up a creditable perfor-

TOP EARNERS IN 1992

Companies	Pre-tax profit (\$m)	EPS (sen)	Price (\$)	P/E ratio (nett)
-----------	----------------------	-----------	------------	------------------

1992 as its cut-off point was June 30 1992. Tenaga should show an improvement in AsiaWeek's next ranking as the company respond with Telekom's financial year ended December 31 1991. Aziz says group operations are expected to be improved in 1994. No dividend was declared for the year reviewed.

12 kilang akan dipotong bekalan

UTUSAN MALAYSIA

MELAKA 17 Feb. — Dua belas buah kilang yang mengeluarkan pelbagai produk di kawasan perindustrian Air Keruh akan dipotong bekalan elektriknya dari jam 10 pagi hingga 5 petang esok.

Langkah pemotongan bekalan elektrik ini dibuat oleh Tenaga Nasional (TNB) Melaka, setelah mendapat arahan dari ibu pejabat mereka di Kuala Lumpur.

Tindakan memotong bekalan elektrik di kawasan perindustrian Air Keruh, esok, dibuat dalam program pemotongan mingguan yang telah dimulakan sejak Isnin lalu.

Sumber TNB Melaka yang mengesahkan perkara itu hari ini, berkata, mereka akan memotong bekalan elektrik dari kabel pembekal *hypark* dari pencawang masuk utama (PMU) Air Keruh yang membekalkan 2.3 MW ke-

12 buah kilang terlibat itu.

Katanya, notis pemotongan itu telah dihantar kepada kilang-kilang terlibat termasuk kilang-kilang lain yang disenaraikan untuk dipotong bekalan mereka.

Sumber itu berkata, langkah memotong bekalan elektrik ini telah dimulakan Isnin lalu bermula di sepanjang Jalan Semabok ke Merlimau yang melibatkan juga rumah kediaman dari jam 10 pagi hingga 5 petang dari kabel PMU Semabok dan Merlimau yang melibatkan 2.7 MW bekalan.

Katanya lagi, semalam pemotongan dibuat di kawasan PMU Merlimau hingga ke kawasan Dang Anum Jasin dan dari Jalan Semabok ke beberapa kawasan perniagaan penting di Bandar Melaka dari jam 10 pagi hingga 5 petang yang melibatkan bekalan 2.2 MW.

Sumber itu memberitahu, pada lusa pula, pemotongan bekalan elektrik akan melibatkan 5 buah kilang di kawasan perindustrian Air Keruh dari jam 10 pagi hingga 5 petang.

Katanya, ia melibatkan pemotong bekalan elektrik dari kabel pembekal *castwell* dari PMU Air Keruh.

Reaksi

Ditanya apakah reaksi dari pelanggan-pelanggan mereka, sumber itu berkata, kebanyakan mereka melahirkan rasa tidak puas hati dengan langkah yang diambil oleh TNB.

Bagaimanapun, sumber itu berkata, dia tidak dapat berbuat apa-apa memandangkan arahan pemotongan bekalan elektrik itu telah diterima dari ibu pejabat mereka.

Menurut sumber itu lagi, untuk seminggu ini,

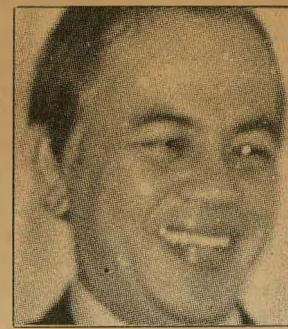
mereka telah menyenaraikan nama-nama kawasan yang terlibat dengan pemotongan bekalan elektrik dan dibuat secara bergilir-gilir.

Menjawab pertanyaan lain pula, sumber itu berkata, setakat ini pihaknya belum lagi mendapat arahan untuk meneruskan langkah pemotongan bekalan elektrik ini, pada minggu hadapan.

Sebelum ini awal tahun 1991, Lembaga Air Melaka telah membuat pencatuan air ke seluruh kawasan di negeri ini termasuk kilang-kilang ekoran krisis air yang paling teruk sekali dihadapi oleh Melaka.

Akibat krisis air itu, buat pertama kalinya, rakyat Melaka dikecualikan dari membayar bil air untuk tiga bulan, mulai bulan Januari.

Mereka sanggup membantu mengurangkan gangguan terhadap operasi mereka akibat terputusnya bekalan elektrik yang menjejaskan pengeluaran mereka, katanya.



KHALIL YAAKOB

Pahang bimbang

KUANTAN 17 Feb. — Menteri Besar Pahang, Tan Sri Khalil Yaakob berkata, langkah mengurangkan penggunaan tenaga elektrik mungkin membantut perkembangan sektor perindustrian negeri dan menjejaskan keyakinan bakal pelabur.

Katanya sebagai sebuah negeri yang sedang membangunkan bidang perindustriannya, Pahang memerlukan bekalan elektrik yang cukup.

Ini kerana elektrik merupakan soalan pertama yang dibangkitkan oleh bakal pelabur sebelum membuat keputusan untuk datang ke negara ini, katanya kepada pemberita selepas mesyuarat Jawatankuasa Tanah Negeri di sini.

Masalah besar akan dihadapi terutamanya di kawasan Lembaga Kemajuan Pahang Tenggara (DARA) yang sedang giat berusaha menarik pelabur ke wilayah itu, katanya mengulas kenyataan Pengerusi Eksekutif Tenaga Nasional Berhad (TNB) Tan Sri Ani Arope supaya penggunaan tenaga elektrik dikurangkan mulai sekarang. — Bernama

Gangguan elektrik akan diatasi

JOHOR BAHRU 17 Feb. — Tenaga Nasional Berhad (TNB) cawangan Wilayah Selatan hari ini memberi jaminan akan mencari jalan mengatasi masalah gangguan elektrik yang dikatakan menjadi punca kekerapan bekalan air terputus.

Pengurusnya, Yaakob Shariff berkata, TNB akan berusaha dengan mengenalpasti pencawang-pencawang elektrik terutama pencawang masuk utama di Pasir Gudang berjalan lancar.

Bercakap kepada Utusan di sini hari ini, beliau memberitahu, gangguan bekalan elektrik di daerah ini memang kerap berlaku kerana ada beberapa pencawang yang tidak dapat menerima bebanan kuasa.

Semalam, Pengarah Jabatan Bekalan Air (JBA) Negeri, Mohamad Hatta Bakri berkata, kekerapan gangguan elektrik menjadi punca bekalan air terputus.



Menurutnya, apabila bekalan elektrik terputus, loji air di Sungai Layang tidak dapat berfungsi dan menyukarkan proses pemuliharaan simpanan air di tangki-tangki utama melalui proses *balancing reservoir*.

Yaakob berkata, bagi mengurangkan beban janakuasa adalah wajar TNB mengurangkan bekalan elektrik pada tempat-tempat tertentu mengikut masa dan keadaan dari satu minit hingga

ga tiga jam.

Beliau berkata, gangguan bekalan elektrik yang serius hanya berlaku empat atau lima kali setahun sebagaimana yang pernah terjadi di seluruh Semenanjung tahun lepas.

"Kami juga mengharapkan agar JBA turut berkerjasama dengan mengurangkan penggunaan elektrik agar sama-sama mewujudkan penggunaan elektrik dan air yang seimbang," ujar beliau.

Mengenai kempen penjimatan penggunaan elektrik, pengurus itu berkata, beberapa majlis dialog dengan pengguna akan diadakan di setiap daerah secara berperingkat.

Menurutnya, TNB juga akan menggunakan khidmat media massa dan elektronik menyebarkan maklumat mengurangkan penggunaan kuasa itu terutama di syarikat-syarikat besar.

Amerika sedia bantu kurangkan krisis tenaga

PULAU PINANG 17 Feb. — Syarikat-syarikat Amerika di Malaysia bersedia bekerjasama bagi membantu mengurangkan krisis tenaga yang sedang dihadapi negara, kata Duta Amerika Syarikat, John Wolf hari ini.

Mereka sanggup membantu mengurangkan gangguan terhadap operasi mereka akibat terputusnya bekalan elektrik yang menjejaskan pengeluaran mereka, katanya.

Bina janakuasa: Kerajaan negeri bersetuju

KUALA TERENGGANU 17 Feb. — Kerajaan negeri bersetuju pada dasarnya untuk membenarkan sebuah syarikat Amerika dan tempatan membina janakuasa elektrik dengan kemampuan 400 megawatt di Terengganu.

Tenaga elektrik yang dihasilkan itu nanti akan dijual kepada Tenaga Nasional untuk diedarkan ke seluruh negara bagi membantu penggunaan bekalan yang sedia ada.

Perancangan bagi pelaksanaan projek berharga lebih RM200 juta itu sedang dalam peringkat perundingan awal antara kedua pihak termasuk mengenal pasti lokasinya.

Janakuasa berteknologi tinggi itu dikatakan akan menggunakan bahan bakar termasuk gas dan minyak yang disalurkan terus dari Kertih di

samping arang batu yang diimport sebagai tambahan.

Menteri Besar Tan Sri Wan Mokhtar Ahmad berkata, langkah itu bertujuan bagi menghadapi kemungkinan krisis tenaga elektrik dari terus berlanjutan di negara ini seperti yang sedang berlaku sekarang.

Bercakap kepada pemberita selepas mempengerusikan mesyuarat Exco di sini hari ini beliau berkata, bagaimanapun kerajaan negeri telah mengenal pasti kawasan dekat Besut yang bakal diberikan untuk menempatkan loji tersebut.

Menurutnya, kerajaan tidak terlibat langsung dalam projek berkenaan kerana semuanya akan dibiayai oleh syarikat terabit.