

**CHARGES FOR
STREETLIGHTING SERVICES**

**INDEPENDENT PRICING AND REGULATORY TRIBUNAL
OF NEW SOUTH WALES**

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Determination No. 6, 1998

November 1998

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1 INTRODUCTION

In July 1997, the Tribunal issued Determination No. 5.2, 1997, which regulated streetlighting charges up to 30 June, 1998. The Tribunal is appreciative that all distributors agreed to maintain the price caps set by the Tribunal in the July 1997 Determination, until this new determination was made.

The Tribunal's determination of maximum pricing for streetlighting services will continue to be necessary as long as effective competition does not exist. The Department of Energy has jurisdiction for contestability; the Tribunal is responsible for determining maximum prices for government monopoly services. The Tribunal's current decisions are recorded in Determination No. 6, 1998 attached to this report.

2 STREETLIGHTING CHARGES

2.1 Background

Last year, the Tribunal set maximum average prices for streetlighting services as follows:

**Table 1 Determination 5.2 1997 Price Caps
by streetlighting component and Average Total Price
\$ per MWh**

	NUOS	SLUOS	Energy	Average Total Price
EnergyAustralia	59	112	39	\$210
Integral Energy	39	162	39	\$240
NorthPower	44	157	39	\$240
Great Southern Energy	43	128	39	\$210
Advance Energy	43	128	39	\$210
Australian Inland Energy	40	131	39	\$210

The distributors agreed to maintain these prices until this new determination was issued.

Impediments imposed by the requirement for metering, and by the definition of an eligible site, prevent streetlighting customers from participating in the contestable energy market. Pending contestability, energy consumption for streetlighting is being regulated by the Tribunal.

There are three components of streetlighting charges: NUOS, SLUOS and energy. NUOS, the network use of the transmission and distribution systems, remains a monopoly service. It will continue to be regulated under the Network Revenue Caps of the respective distributors.

SLUOS, the use of the streetlighting system, comprises costs mainly arising from the operation, maintenance and capital costs of the streetlighting network. This was mandated for contestability by the Department of Energy in February 1997. However, effective contestability has not occurred. Hence, the Tribunal continues to regulate this component.

2.2 The Tribunal's Determination

Many valuable points were made by the distributors during the public hearings. The distributors suggested the annuity method for pricing the capital and maintenance component of streetlighting, i.e. SLUOS, to minimise potential price shocks. The distributors commented that the level of prices under the existing determination does not allow a commercial rate of return on the streetlighting business. They remarked that this, in turn, does not provide appropriate pricing signals to customers, or investment signals to business. These issues must be considered in the context of the major review.

In the meantime, the Tribunal has determined that the maximum average prices set out in Table 1 above should continue to apply until the gazettal of a subsequent determination. This is expected to occur when the 1999 major review comes into force.

The maximum average prices set by the Tribunal in the current determination are also subject to side-constraints. These side-constraints limit streetlighting bills during the period of this determination to be no more than 5 percent greater than the total charge as at 30 June 1998, for the same level of service. The side-constraints are specified and their operation explained in the attached determination.

2.2.1 Definitions

The total price for the provision of streetlighting services comprises three components:

- NUOS, the Network Use of System component.
- SLUOS, the Streetlighting Use of System component.
- Energy.

NUOS

The Network Use of System component refers to the recovery of the costs of the appropriate proportion of the general transmission and distribution network assets used to deliver energy to street lights. A charge is levied for the use of these network assets.

SLUOS

SLUOS relates to the physical streetlighting system itself. This includes the street lights and the direct connection to the distribution wires. It also includes poles dedicated to streetlighting.

The range of costs included under SLUOS include:

- Operating and maintenance
 - asset replacement and renewal
 - tree trimming
 - asset inspection
 - fault identification and repairs
 - asset design and project management.
- Administration
 - maintenance of asset records

- bill preparation and revenue collection.
- Capital costs for distributor-funded streetlighting assets
 - depreciation
 - rate of return.

Energy

The Energy component refers to the electricity consumed in streetlighting, including energy losses in the network and streetlighting systems.

The costs included in this component includes the:

- Energy purchase costs, comprising the weighted average of vesting contract and spot prices plus a retail margin.
- Costs of administering streetlighting energy purchases.
- Energy losses in the network and streetlighting systems.

The level of energy consumed in streetlighting systems usually exceeds the wattage indications on the various streetlighting assets such as lamps, ballasts and controls. The energy consumed, as calculated from such indications, usually has to be adjusted to take account of losses in the streetlighting system.

Energy losses also occur in the transmission and distribution systems before energy reaches the streetlighting system to produce light in the lamps. The extent of network and streetlighting systems losses is disclosed by the distributors in their network tariff lists¹.

The average price caps² in this determination already include an adjustment for all network and streetlighting systems losses. The existing determination included an adjustment for network losses only. Hence, the charge to the customer under this determination should be based on the wattage indications of the various streetlighting assets.

2.2.2 Relationship to overall network and retail revenue caps

The network component of streetlighting, NUOS, will continue to be regulated within the respective network revenue caps of the distributors. This is the same arrangement as in the existing determination.

The Energy component of streetlighting will be regulated separately from the Regulated Retail Gross Margin Cap of each distributor.

The SLUOS component will be regulated separately from the network and retail businesses of each distributor. These are the same arrangements as under the existing determination. The Tribunal will continue to regulate SLUOS and the retail supply of energy for streetlighting until effective contestability for these services commences.

In this determination, any premium generated from GreenPower sales is stated explicitly as being outside the Tribunal's regulation.

¹ Available from IPART's website, www.ipart.nsw.gov.au and some distributors' websites.

² Sections 5 and 6 of the Coopers & Lybrand report discuss the Energy and NUOS pricing methodology in detail.

2.3 The inquiry process

2.3.1 Consultancy review

Following the release of the existing determination, the distributors requested an independent review by consultants. The consultancy review of streetlighting services was completed in March 1998. The Tribunal provided for such a review in the existing determination in recognition of uncertainties and inconsistencies in the data that had been placed before it. The distributors' request for the review reflected concerns that:

- The price caps determined by the Tribunal were not sufficient to allow the provision of streetlighting services on a commercial basis.
- The use of a \$/MWh price cap was inappropriate.

The Tribunal's existing determination recognises that the price cap is an interim measure only. Data problems had prevented the Tribunal from developing or endorsing more sophisticated regulatory formulae. The Tribunal indicated that it would look to do this in subsequent reviews.

Coopers & Lybrand, in association with Worley International Limited, was selected with the distributors' involvement to carry out the review. The review commenced in October 1997 with a meeting of the consultant, distributors and council representatives. The consultant's report is available on the Tribunal's website, www.ipart.nsw.gov.au

The recommendations from the consultancy review are briefly discussed in the Tribunal's Discussion Paper on the Streetlighting Review issued on 16 April, 1998. The consultant's key recommendations are:

- Existing price caps should continue until the implementation of the major review.
- For the major review, the Energy component of streetlighting should be regulated within the regulated retail revenue cap pending the contestability of streetlighting services. Similarly, the use of systems component of the streetlighting network should be regulated within the network revenue cap.

The Tribunal invited submissions on the consultant's findings and recommendations from the NSW electricity industry, councils, other stakeholders and the interested public. Public hearings for this review were held on 20 August, 1998.

2.3.2 Submissions received

A number of submissions were received from individual councils. The Local Government and Shires Association (LGSA) did not make a submission, but was invited to make a presentation on behalf of the councils at the public hearing on 20 August, 1998. Blacktown City Council also made a presentation. Four submissions were received from the electricity industry in relation to streetlighting. A full list of submissions received for this determination is set out in Appendix 1 of this report.

The key points mentioned by the LGSA on behalf of the Councils are as follows:

Regulatory regime

The LGSA welcomes the recommendations in the consultant's report to maintain the July 1997 price caps pending the major review. The LGSA also supports the consultant's longer term recommendation to regulate the Energy component within the Retail Revenue Cap, and the SLUOS component within the Network Revenue Cap pending contestability.

The LGSA acknowledges that continuing data difficulties and unresolved issues relating to the government's contestability regime make alternative approaches impractical at this stage. Councils are anxious to move towards contestability.

Service standards and transparency

The councils are critical of a perceived decline in service standards. They expressed the need for customer service contracts to be established. They also expressed their continuing high degree of dissatisfaction with the lack of detail in accounts provided by distributors.

Ownership

Councils noted that ownership has remained a contentious issue, yet it is fundamental to future pricing arrangements. The LGSA was of the view that negotiated, as opposed to arbitrary, resolution is required to realise the consultant's recommendations on this issue. The LGSA noted that a NSW Treasury response to Blacktown City Council that streetlighting assets are not even partly owned by councils, appears to be inconsistent with current government discussions on reciprocal charging, suggesting that traditional council infrastructure should be handed back to councils. This compounded the lack of clarity surrounding the issue.

Four distributors made submissions to this inquiry. The key points raised were:

Annuity approach for pricing

Advance Energy, energyAustralia and NorthPower favour an annuity approach to calculating capital and asset consumption costs in setting streetlighting prices. These distributors argue that this will reduce price shocks for customers in comparison with the accounting depreciation approach to estimating capital costs. It is also argued that it will reduce the administrative burden of maintaining asset related records. Finally, there is general agreement in favour of the annuity approach in that it offers a forward-looking approach to asset management.

Energy price

The distributors contend that the energy cap should have regard to the new vesting contracts which were proposed by the NSW Government and are now under consideration by the Australian Competition and Consumer Commission. If approved in their original form, the new vesting contracts are likely to increase energy costs for the franchise market. This increase is likely to exceed the consultant's recommended Energy price caps.

GreenPower

In their submissions, the distributors request that the premium generated from GreenPower sales in streetlighting be outside the Tribunal's price regulation. This issue was not covered explicitly in the last determination.

SLUOS

The distributors' submissions state that current price caps do not provide for an adequate return on capital or sufficient incentives for future capital expenditure. The distributors support the regulation of streetlighting as a separate service outside the current Network Revenue Cap. Streetlighting, they argue, is a distinct ancillary business with its own cost drivers. There are some potentially contestable components.

Per luminaire charge

The distributors support the consultant's recommendation that the unit used for pricing SLUOS should be the luminaire rather than the MWh. The luminaire is preferred because the costs of maintaining and operating the streetlighting system are more closely correlated with the number of luminaires, than with the level of energy consumed.

Ownership

Most distributors believe that, regardless of the ownership issue, responsibility for systems maintenance and performance should remain with the distributor. The distributor will be responsible for obtaining streetlighting services as cheaply as possible.

SEDA made a submission to this inquiry and also presented its opinions to the public hearings. SEDA is concerned that the use of a price cap, as opposed to a revenue cap, discourages energy efficiency.

2.4 Basis of the Tribunal's decisions

2.4.1 Prices in Determination No. 6, 1998

The Tribunal has decided to continue with the price caps established by the existing determination. This is a transitional arrangement pending the consideration of some significant issues as part of the major review. This is consistent with the recommendation in the consultant's report. It also reflects the Tribunal's concerns about the accuracy of the cost data presented to the consultant, as well as the accuracy and appropriateness of the estimated asset values.

At the public hearings some distributors agreed that it may be appropriate to maintain last year's prices until the major review is implemented in the coming financial year. This plan is based on the industry's awareness of the major effort involved in evaluating the potential impact of the industry proposed annuity approach to longer term pricing. Further, some distributors have indicated that benchmarking studies currently underway may provide additional information about potential efficiency gains in streetlighting. It has been accepted that it is appropriate to consider these evaluations within the major review.

2.4.2 MWh unit

The distributors have presented a strong argument for per luminaire pricing of the SLUOS component. The consultant's findings discussed below appear to endorse these arguments. They support the concerns about MWh pricing previously expressed by the Tribunal. Nevertheless, for reasons of simplicity and continuity, the Tribunal has decided to maintain the MWh unit basis for the price caps, pending further examination of the costs and benefits of the separate regulation of SLUOS as part of the 1999 major review. As part of these considerations, the form of regulation of SLUOS will also be examined. The Tribunal wishes to defer making any further changes in the interim.

As mentioned above, the consultant has recommended that the luminaire is a more appropriate cost driver for the SLUOS component than the MWh unit. The luminaire is the fitting to which lamps or globes are attached. The Tribunal concurs with the consultant's findings in this regard. A large proportion of SLUOS costs comprises the labour and travel costs of moving from luminaire to luminaire when changing lamps, which is the component requiring the most regular maintenance.

Distributors may, if they wish, use the luminaire as the unit for expressing their streetlighting charges to the councils. This flexibility in expressing streetlighting charges has always been available to distributors. In last year's determination, the pole was another unit mentioned that can be used by distributors to calculate charges, if appropriate.

2.4.3 GreenPower

In its March 1996 Determinations the Tribunal exempted any premium generated from GreenPower sales from its regulation under the Network Revenue Cap and the Regulated Retail Gross Margin. GreenPower sales are sales of 'green electrons' for which the customer has agreed to pay an extra amount, a premium, on the 'normal' bill. Consistent with the intent of the 1996 Determinations, GreenPower premium generated from streetlighting sales will now also be exempt from the Tribunal's price regulation. This should encourage the industry to promote ecologically sustainable practices in providing streetlighting services, where these are commercially sustainable.

2.4.4 Translation of Determination to tariffs

The maximum revenue that a distributor may earn for providing streetlighting services has been expressed by the Tribunal as a price per MWh.

The price per MWh expressed represents the **average** price per MWh for the streetlighting service component right across the distributor area. When translated into specific tariffs by the distributors to reflect the actual combination of services provided to the individual councils, this average price may result in specific tariffs that are higher or lower than the maximum average price set by the Tribunal. It should be noted that most distributors express their tariffs as per annum charges for a specific bundle of services.

As an example, the following table is an extract from a list of streetlighting tariffs provided to the Tribunal by a distributor after the existing determination had been issued.

Table 2 Sample Streetlight Tariffs, \$pa

DESCRIPTION					TARIFFS	
Lamp	Rating	Connection	Lantern	Mounting	Rate 1 per annum	Rate 2 per annum
MBF	1*50	Overhead	Basic	Pole, wall or u/pass	\$70.11	\$45.64
SON	1*50	Overhead	Basic	Pole, wall or u/pass	\$88.23	\$62.52
MBF	1*50	Underground	Basic	6m Standard (URD)	\$194.38	\$65.64
SON	1*50	Underground	Basic	Standard 6 - 6.5m(URD)	\$212.50	\$82.52

Rate 1 is for:

1. Supply and installation of streetlighting assets at the distributor's cost.
2. Energy supplied by the distributor.
3. Full maintenance by the distributor.
4. Replacement by the distributor when worn out.

Rate 2 is for:

1. Supply and installation of streetlighting assets at **customer's cost**.
2. Energy supplied by distributor.
3. Lamp maintenance only by distributor.
4. Repairs due to damage and replacement due to age, paid for by customer.

In effect, the maximum prices expressed by the Tribunal represent a cap on *average* prices. This allows the distributor to restructure tariffs.

2.4.5 Side-constraints

There are various reasons why distributors undertake tariff restructuring or tariff changes. These reasons may include the correction of existing cross-subsidies or the standardisation of tariffs inherited from past distributors when in 1995/96, the industry consolidated from 25 to the present six distributors.

The Tribunal has determined some side-constraints on possible tariff changes. In the existing determination, the side-constraint was 2.3 percent. This meant that any tariff change should not cause a bill to increase by more than 2.3 percent of the previous bill prior to the implementation of the new determination, for the same level of service provided. This was intended to avoid price shocks for customers of streetlighting services.

The side-constraint for the new determination is 5 percent. Any tariff change following the implementation of this determination should not cause a bill to increase by more than 5 percent of the bill immediately prior to this determination for the same level of service. The distributors agreed to maintain the July 1997 prices until this determination was made. Thus, it is expected that during the course of this determination, any bill for a council will be no more than 5 percent greater than the bill which would have been calculated using the relevant tariff in place on 30 June, 1998 for the same standard of service.

The 5 percent side-constraint for this determination is consistent with that for non-domestic customers established in the Tribunal's existing determinations³ for the distributors' network and retail revenue caps. The 2.3 percent side-constraint in the existing determination was the CPI (Consumer Price Index) increase in the average of the all-groups CPI for Sydney for the four quarters to March 1997 relative to the same index for the same period in the previous year. The CPI increase for the four quarters to June 1998 was 0.1 percent. The Tribunal considers that limiting the side-constraint for this determination to 0.1 percent would restrict the distributors from implementing tariff restructuring if they wished to do so.

In order to comply with the maximum average price caps determined by the Tribunal, any tariff adjusted upwards should normally be accompanied by a downward adjustment to at least one other tariff.

2.4.6 Level of service

As noted above, for the same level of service charged in a council's streetlighting bill just prior to the implementation of this determination, any bill during the course of the new determination should be no more than 5 percent greater than that calculated using the relevant tariff in place on 30 June, 1998. However, a greater increase is allowed if the quality of service has improved. Similarly, changes in the mix of streetlighting assets and connection types may have a bearing on the distributor's pricing. The customer is best placed to monitor service changes relative to total charges over time.

The distributors are expected to comply with the maximum average prices set by the Tribunal if the level of service they provide has not changed. The distributors must be prepared to substantiate any variation from the Tribunal's determination.

2.5 Issues considered under Section 15

Under section 15 of the *Independent Pricing and Regulatory Tribunal Act 1992*, the Tribunal is required to consider certain matters and to indicate what regard it has had to these matters. This determination represents a continuation of the pricing arrangements under the existing determination, although in modified form. The existing determination provided a full discussion of issues considered under section 15. Additional matters raised in the current review are discussed below.

2.5.1 Costs and efficiency

- *the cost of providing the services concerned [s15(1)(a)]*
- *the need for greater efficiency in the supply of services so as to reduce costs for the benefit of consumers and taxpayers [s15(1)(e)]*
- *the impact on pricing policies of any arrangements that the government agency concerned has entered into for the exercise of its functions by some other person or body [s15(1)(h)]*
the need to promote competition in the supply of the services concerned [s15(1)(i)]

Cost of service and scope for efficiency gains

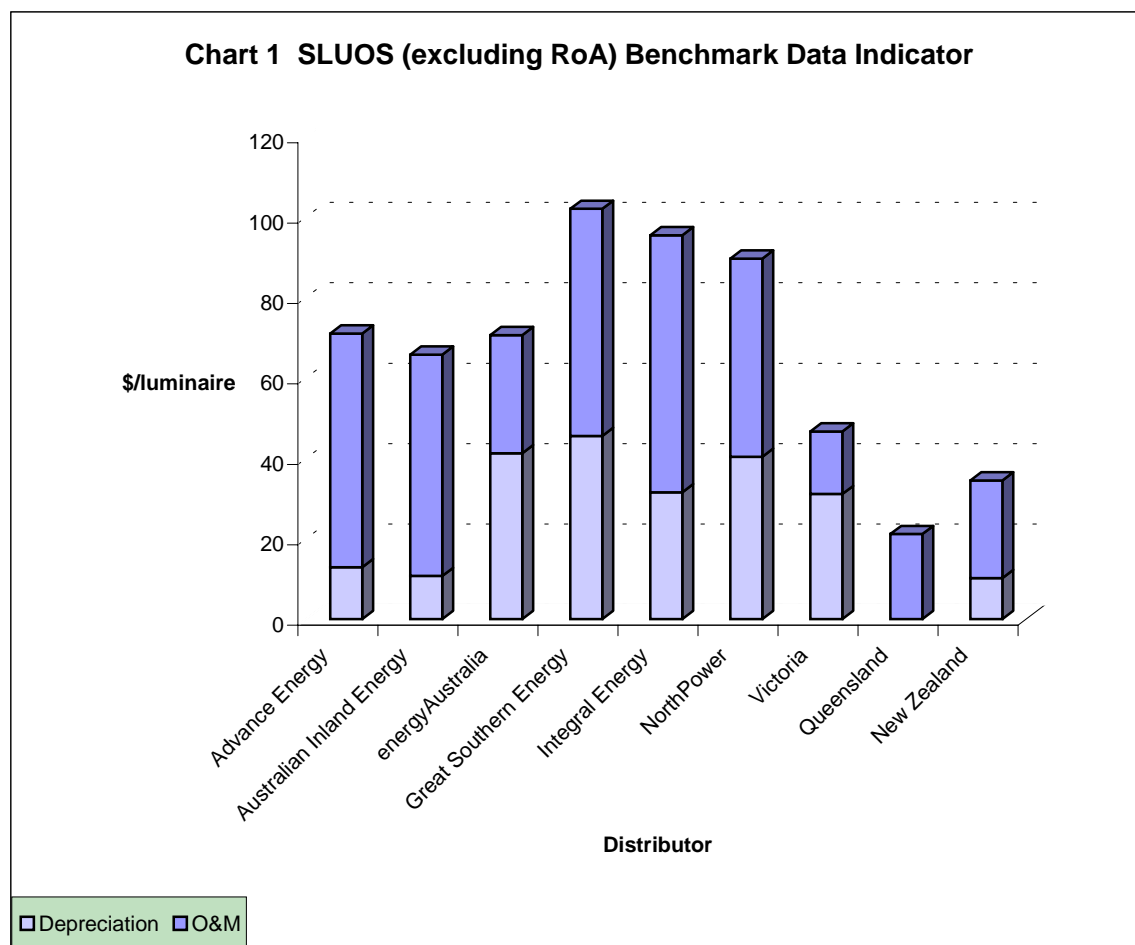
The main cost items are:

- operating and maintenance costs

³ *Determination 5.3, Distributors' Prices, July 1997.*

- depreciation
- return on capital.

For its 1997/98 review, the Tribunal found it difficult to obtain reliable, consistent data on streetlighting costs. The review by Coopers & Lybrand encountered similar problems, “*The recommendations that we have outlined ... reflect the imperfect nature of the data available and an inability to establish an acceptable level of confidence in this information.*”⁴ The variability of costs is highlighted in the following chart.



Notes:

- 1 Source: Coopers & Lybrand and Worley International Limited, IPART, *Streetlighting Review Final Report, March 1998*, Appendix I.
- 2 Depreciation information for Queensland was not available.
- 3 The New Zealand distributor was a rural distributor.
- 4 A luminaire houses the lamp or lamps that provide streetlighting.

The benchmark data on costs shown in Chart 1 suggests that NSW distributors may be able to achieve further cost efficiencies.

The consultant also asked the NSW distributors to estimate construction costs for a typical (not necessarily industry best standard) industry streetlighting project having regard to the

⁴ Coopers & Lybrand and Worley International Limited, IPART, *Streetlighting Review Final Report, March 1998*, Summary Point 23.

requirements of AS1158 design standards. These estimates ranged between \$891 per luminaire and \$1,821. The benchmark distributors also submitted their estimates, which ranged between \$705 and \$1,016. Worley International Limited's proposed estimate for a 'typical' utility was \$1,209 per luminaire. Only two NSW distributors quoted estimates below \$1,209. This again suggests that there may be scope for efficiency gains by the distributors. At the public hearings NorthPower referred to its UMS benchmarking study which indicated a possible reduction of about 20 percent in its streetlighting operating costs.

Competition

The Department of Energy has advised that customer connection works, including the installation and maintenance of streetlighting assets, that were scheduled for contestability under section 31 of the Electricity Supply Act have been deemed fully contestable since the last inquiry.

Installation of streetlighting in new areas is contestable. However, at this stage, effective competition in the maintenance of streetlighting services has not occurred. The distributors' submissions indicate that for some parts of SLUOS services, such as streetlighting installation design services, call centre services, and night patrols, a form of contestability could be acceptable to the network businesses. This is reflected in energyAustralia's proposal for a 'contestable monopoly' concept. This approach would involve the customer in negotiating with the distributor on the configuration, asset specification and level of service. However, the council would not negotiate with the end supplier, which might be a private contractor. The decision about which services would be used, and at what cost, would be made by the distributor. In the main, the industry view is that there were synergies in operating the streetlighting business as a monopoly together with the distribution network business.

In the absence of customer choice, the Tribunal continues to regulate streetlighting charges. Separate price caps for the SLUOS and Energy components will facilitate the separation of these services if effective contestability should occur.

2.5.2 Consumer protection

- *the protection of consumers from abuses of monopoly power in terms of price, pricing policies and standard of services [s15(1)(b)]*
- *the effect on general price inflation over the medium term [s15(1)(d)]*
- *the social impacts of the determinations and recommendations [s15(1)(k)]*

Pricing

The price caps set by the Tribunal last year reduced industry streetlighting revenue by about 14 percent or \$9m. The Tribunal has determined that the prices set in the existing determination should continue.

The following Table compares the Tribunal's determination since 1997/98 with the distributors' estimates of the full costs that could reasonably be attributed to streetlighting.

Table 3 Distributor Streetlighting Prices

NSW Distributor	Distributors Estimated Total Price \$/MWh		Tribunal Determination \$/MWh
	1996/97	1997/98	Since 1997/98
Advance Energy	249	289	210
Australian Inland Energy	215	177	210
energyAustralia	237	NA	210
Great Southern Energy	NA	309	210
Integral Energy	307	325	240
NorthPower	300	312	240

Notes:

1. energyAustralia did not provide energy purchase costs. Its estimated full cost for SLUOS was \$198 and for NUOS, \$44/MWh.
2. Great Southern Energy could not provide the required information for the 1997/98 inquiry.
3. Data provided to the consultant by Australian Inland Energy indicates a lower price than that supported by the data provided for the 1997/98 inquiry.

At present, the distributors have a large number of streetlighting tariffs effective within their areas of operation. In part, these reflect the various pricing practices of the previous 25 distributors who were combined to create the current six distributors. It would be desirable to simplify tariff structures and harmonise tariffs where the current differences do not reflect costs.

To enable the distributors to make progress on this, while limiting the potential for price shocks, the Tribunal has determined that the charges for any council should not increase by more than 5 percent for the same service level, during the course of this determination.

Service standards

Integral Energy has indicated that it has service agreements in place with councils. Other distributors have indicated their willingness to establish service agreements. The Tribunal encourages distributors and councils to review their pricing structures and policies in line with the level and type of service involved.

As the main purchasers of streetlighting services, councils are responsible for providing this service to the broader community. As such, councils should reach agreement with distributors on the streetlighting service they require. Establishment of service agreements may assist in this process. Where councils wish to obtain a 'special' standard of service, a price negotiated through a competitive process may be appropriate. Such prices would not be regulated. An example of this is the streetlighting "smart pole" installation required by Sydney City Council. Sydney City Council intends to select a supplier for the required smart poles through a competitive process. If energyAustralia were to be successful, the resulting revenues from the competitive process would not be regulated by the Tribunal. However, Sydney City Council should also have the option of choosing a 'normal' service level at the regulated tariff.

Impact on cost of living

The effect of streetlighting charges on the overall cost of living as measured by the CPI is expected to be minimal, (apart from any changes in service levels), as the Tribunal has determined that average prices will not change from last year.

Social impacts

As the 'customers' for streetlighting services are councils, any social impacts will be felt through the impact on councils. Any such impacts will be small given that:

- There is no increase in average charges.
- The charges for the same level of service cannot increase by more than 5 percent during the life of the determination.

2.5.3 Financial viability

- *the appropriate rate of return on public sector assets, including appropriate payment of dividends to the Government for the benefit of the people of NSW [s15(1)(c)]*
- *the impact on pricing policies of borrowing, capital and dividend requirements of the government agency concerned and, in particular, the impact of any need to renew or increase relevant assets [s15(1)(g)]*

Rate of return

Some distributors state in their submissions that the price caps do not allow for a reasonable recovery of their capital costs, which comprise a rate of return and depreciation. The distributors have arrived at this analysis by comparing their estimated full operating and maintenance costs against the price caps. The residual income was then assumed to be the Tribunal's provision for capital charges. Based on this approach, the distributors have claimed that the rate of return earned on streetlighting ranged between 0 percent and 4 percent.

However, as indicated in earlier sections of this report, on average the distributors' estimated full operating and maintenance costs were more than twice as high as the benchmark distributors' costs. Furthermore, there was a very wide variation amongst the NSW distributors' cost estimates. The Tribunal believes that the size of these differences in cost performance raise questions as to whether further significant operating efficiencies are possible. This would provide scope for higher returns relative to efficient costs.

A number of distributors have indicated that in last year's inquiry, they had difficulty in differentiating distributor-funded streetlighting assets from those funded externally. The subsequent review carried out by the consultant indicates that the state of these records has not improved. The rate of return should be provided for distributor-funded assets only. It is not appropriate to provide a rate of return to the distributor on capital investments made by external parties.

Capital structure

The streetlighting business represents about 1 percent of the electricity industry. Hence, the capital structure that applies to distributors' streetlighting business is expected to be that for the distributors' business in general, with appropriate apportionment. Future investment in streetlighting is likely to be funded increasingly from current charges, due to two factors:

- Councils are requiring that streetlighting assets for new developments be funded by the developer.
- Progressive implementation of the capital contributions determination handed down in December 1996 in regard to the charging out of customer-dedicated assets.

The new determination is not expected to affect the capital structure of the distributors' business.

2.5.4 Environmental issues

- *the need to maintain ecologically sustainable development by appropriate pricing policies that take account of all the feasible options available to protect the environment [s15(1)(f)]*
- *considerations of demand management and least cost planning [s15(1)(j)]*

In the existing determination it was acknowledged that price caps expressed in the MWh unit might not provide the distributors with appropriate incentives to pursue energy efficiency initiatives. This matter was raised by SEDA in its submission and presentation at the public hearing. The Tribunal plans to consider this issue at the 1999 major review.

However, the new determination explicitly provides that GreenPower premiums from streetlighting sales will be exempt from the price caps.

2.5.5 Standards

- *standards of quality, reliability and safety of the services concerned [s15(1)(l)]*

The Tribunal believes that with a greater level of information and more transparent pricing of the three components of streetlighting services resulting from the inquiries and the consultant's review, councils and distributors alike should be better placed to further consider the appropriate relationship between prices for given levels or types of service standards. As mentioned earlier, distributors offer different tariffs according to the package of services provided.

3 ISSUES FOR THE 1999 MAJOR REVIEW

The consultancy review and the distributors' submissions highlight a number of important issues. These are:

1. Efficiency of current costs.
2. Whether the distributors can earn a commercial return at current prices.
3. Adoption of the per luminaire basis for charging.
4. Use of an annuity approach to regulation.
5. Future form of revenue regulation.
6. Whether there should be a separate SLUOS revenue cap.

Unfortunately, little new data on costs has been provided since the consultant's report, apart from the relatively small Energy component. The Tribunal encourages the distributors to address the concerns highlighted in the consultant's report in providing additional information as part of the major review.

The last three issues listed above are important matters to be considered a part of the major review. The Tribunal recognises that there is merit in a number of the arguments presented by the distributors. It will consider each issue in the light of submissions to date and any subsequent submissions received as part of the major review.

The new determination is an interim decision and should not be seen as carrying judgement on the above-mentioned issues.

4 CONCLUSION

In determining maximum prices for streetlighting services for the interim period until the implementation of the major review in 1999, the Tribunal has considered the consultant's findings, the councils' submissions, and the distributors' comments. At the public hearings, most distributors indicated acceptance of the Tribunal's proposal for maintaining prices pending the resolution of broader issues more appropriately examined in the major review. The Tribunal has thus determined that the price caps set in the existing determination should continue to be adhered to by the distributors under Determination No. 6, 1998 until a subsequent determination is made.

The Tribunal has also determined that the unit used to calculate the maximum revenue that may be earned by the distributors will continue in this interim period to be the MWh. The Tribunal has noted the concerns raised by SEDA and others regarding possible environmental issues associated with the use of this unit rather than the luminaire. Continuation of the current form of the cap is an interim step. Alternative forms of control will be considered as part of the major review.

The new determination explicitly excludes GreenPower premiums realised from streetlighting sales from the Tribunal's regulation. The determination records a 5 percent side-constraint on a council's bill for the same level of service.

The distributors' submissions raise some important issues, as mentioned in the previous section. These should be considered in the major review.

The Tribunal's decisions are recorded in Determination No. 6, 1998, attached to this report.

APPENDIX 1 LIST OF SUBMISSIONS

Advance Energy
Blacktown City Council
EnergyAustralia
Gosford City Council
Hume Shire Council
Integral Energy Australia
Junee Shire Council
Michael Mobbs
Nambucca Shire Council
NorthPower
Pittwater Council
Shellharbour City Council
Strathfield Council
Sustainable Economic Development Authority
Tweed Shire Council
Wyong Shire Council

RELATED PUBLICATIONS ISSUED BY IPART

Determination 5.2, Streetlighting Charges, July 1997

Tribunal Discussion Paper - Streetlighting Review 1998/99, April 1998

Report to IPART by Coopers & Lybrand on Streetlighting Review, March 1998

Electricity Prices, July 1997

*Electricity Services Review of 1996/97 Determinations and Other Issues,
An Information Paper, Discussion Paper DP-20, March 1997*

*Pricing for Capital Contributions and Recoverable Works, Determination No. 10, December 1996
and Determination 5.4, July 1997*

These documents are available via the Internet at IPART's website, www.ipart.nsw.gov.au or on request from the Tribunal. Telephone (02) 9290 8400.



INDEPENDENT PRICING AND REGULATORY TRIBUNAL
OF NEW SOUTH WALES

**DETERMINATION OF MAXIMUM PRICES TO BE CHARGED UNDER SECTION
11(1) OF THE INDEPENDENT PRICING AND REGULATORY TRIBUNAL ACT
1992**

Ref No: 98/188

Determination: No. 6, 1998

Agencies: Advance Energy, Australian Inland Energy, energyAustralia,
Great Southern Energy, Integral Energy, NorthPower

Services: Electricity services - street lighting services

Declaration of Government Monopoly Services under Section 4 of the Act:

Electricity Services Order dated 12 November 1993 - page 6795, Gazette No 124

**Maximum prices determined under Section 14 of the Act to be charged until replaced
by the gazettal of a subsequent determination.**

STREET LIGHTING CHARGES

The Tribunal will regulate Street Lighting charges in its three separate components. Side constraints have also been determined, as well as other conditions as follows:

Price Caps

Table 1 Price Cap by Street Lighting Component and Average Total Price

\$/MWh	NUOS	SLUOS	Energy	Ave Total Price
EnergyAustralia	\$59	\$112	\$39	\$210
Integral Energy	\$39	\$162	\$39	\$240
NorthPower	\$44	\$157	\$39	\$240
Great Southern Energy	\$43	\$128	\$39	\$210
Advance Energy	\$43	\$128	\$39	\$210
Australian Inland Energy	\$40	\$131	\$39	\$210

Side Constraints Applying to Street Lighting

The following limitations are to apply to each distributor:

1. For any billing period during the course of this determination, the total charge for a council is to be no more than 5 percent greater than the total charge which would have been calculated using the relevant tariff in place on 30 June, 1998 (for the same standard of service). If the standards of service are modified, the distributor will have to demonstrate that the individual councils involved have knowingly agreed to pay more for a variation to the level of service prior to the modification, should the distributor submit that the determined price caps were exceeded on this basis.
2. The average number of hours on a per lamp per night in a year basis should not be less than 11.5 hours, excluding the duration when recoverable capital works are involved.

Recoverable works are discussed in detail in the Capital Contributions Determination No. 10 of 1996. Broadly, recoverable works are those capital works undertaken at the request of individuals or organisations, which are not for the purpose of establishing a new connection to the system. These works include:

- repair of street light poles due to accidents
- relocation of street light poles on a customer's property at the customer's request
- reinstatement of street light assets following works by other services, such as roadworks.

Period of Cap

Prices as per Table 1 in this determination are to apply from the date of its gazettal. Each of these price caps will continue to be effective until replaced by the gazettal of a subsequent determination.

Inter-action with Existing Revenue Caps Regulation

The NUOS component is already regulated within the existing network revenue cap of each respective distributor. This arrangement will continue. The SLUOS component will be regulated separately from the network and retail businesses of each distributor. The Energy component for street lighting will be regulated separately from the Regulated Retail Gross Margin Cap of each distributor.

GreenPower

Any premium extracted from GreenPower sales will be exempt from the Tribunal's pricing regulation. A premium is the extra amount, in addition to normal tariffs or a normal bill, that a customer has agreed to pay for the purchase of 'green electrons'. This applies to the NUOS and Energy components of streetlighting services.

Thomas G Parry
Chairman
27 November 1998