EnergyAustralia Pty Ltd
ABN 99 086 014 968

Level 33
385 Bourke Street
Melbourne Victoria 3000

Phone +61 3 8628 1000
Facsimile +61 3 8628 1050

enq@energyaustralia.com.au
energyaustralia.com.au

23 December 2016

EPA NSW
PO Box A290
Sydney
NSW 2000

Attention: David Fowler, Director Regulatory Reform and Advice

EnergyAustralia submission on the NSW EPA Review of the Load-Based Licensing Scheme Issues Paper

EnergyAustralia welcomes the opportunity to make a submission to the NSW EPA Review of the Load-Based Licensing (LBL) Scheme Issues Paper.

As pointed out in the Issues Paper, NSW air and water quality is generally good by world standards. This is, in part, the result of existing regulatory arrangements which have been developed over an extended period in consultation with industry. It is important that environmental protection regulation is proportionate and appropriately targeted to ensure maximum effect. EnergyAustralia considers that current Licence conditions are effective tools to drive emission reductions.

Potential options presented in the paper suggest that LBL fees payable by the electricity sector could increase substantially. For EnergyAustralia, this would impose unnecessary cost and would not incentivise action to reduce emissions, as our NSW generators are already efficient. EnergyAustralia proposes that rather than simply increase LBL fees, efficient generators should be afforded opportunities to invest in environmental offsets to achieve the equivalent (or greater) environmental outcomes.

We consider that the LBL could be an effective and efficient regulatory tool to address emissions from smaller emitters that have opportunities for abatement and are not currently subject to the level of regulatory EPA scrutiny that applies to electricity generators.

EnergyAustralia is aware that national air quality standards are currently being reviewed. On all regulatory matters we prefer national consistency as opposed to differing State-based obligations, to minimise market distortion across Australia. We recommend that the NSW EPA await the national review and adopt a national standard.

For further information on our attached submission, please contact Anne Tourney, Corporate Environment Advisor, on (03) 8628 1022 or anne.tourney@energyaustralia.com.au.

Yours sincerely

Lee Evans
Policy and Government Leader

EnergyAustralia Submission on the Review of the NSW EPA LBL Scheme

About us

EnergyAustralia is one of Australia's largest energy companies, providing gas and electricity to 2.5 million household and business customer accounts in NSW, Victoria, Queensland, South Australia and the Australian Capital Territory. EnergyAustralia owns and operates a portfolio of energy generation across Australia, including coal, gas and wind assets with control of over 4,500MW of generation in the National Electricity Market (NEM).

We serve approximately 1.2M retail customer accounts in NSW and operate the coal fired Mt Piper power station near Lithgow and the Tallawarra gas fired power station near Wollongong.

Mt Piper is the newest, most efficient and the best environmentally performing coal fired power station in NSW. Tallawarra is the most efficient combine cycle gas fired power station in Australia. These assets are amongst the best performing power plants in Australia, conserving finite resources and with some of the lowest emissions of air pollutants and greenhouse gases.

Environmental discharges are regulated in accordance to licences issued by the NSW EPA, and compliance is strictly enforced. EnergyAustralia applies an environmental management system for the control of environmental risks that are independently certified to the internationally recognised standard ISO14001.

Operating significantly below emission limits ensures minimal air quality effects in the surrounding region and protection of the health and wellbeing of the community. Mt Piper has best practice 'fabric filter' technology that effectively captures and removes the vast majority of particles from the gaseous emissions to air.

EnergyAustralia has also invested over $1 billion in renewable energy and underpinned approximately 14% of the large scale wind farms in the NEM. Our renewable energy investments deliver enough energy to power 200,000 homes annually.

Response to the Issues Paper

The Paper lists objectives for a 'well designed and effective' LBL scheme. These include that the scheme should be environmentally beneficial, reasonable, equitable, clear, easy to use and administer, responsive, flexible, cost effective and efficient.

These are appropriate objectives for the LBL scheme. Criteria similar to the EPA's list of objectives that can be used to test the appropriateness of potential changes to the LBL are:

- Effectiveness: will changing LBL fees on electricity generation result in environmental improvements (i.e. further abatement)?
- Efficiency: Will changing LBL fees on electricity generation provide a net benefit to the community?
- Flexibility: Are there opportunities to provide more flexibility to electricity generators to reduce fee liabilities?
- Equity: is the distribution of fees fair and equitable?

While the paper does not contain specific change proposals, the potential options presented suggest that LBL fees payable by the electricity sector could increase as a result of changes to fee levels, coverage (i.e. which pollutants attract a fee) or a combination of these.

The appropriateness of increasing LBL fees for Mt Piper and Tallawarra generators based on these criteria is discussed in the following sections.

Effectiveness

EnergyAustralia considers that increasing LBL fees will not drive improvements in emissions from Mt Piper or Tallawarra as emissions are already low. In our view raising LBL fees will not incentivise action to further reduce emission levels.

The driver for change to date has been compliance with changes to emission groups as defined in within the NSW Protection of the Environment (Clean Air) Regulations and pollution reduction programs (PRP's). Emissions from EnergyAustralia power plants are strictly controlled using approved licences and other regulatory instruments.

While NOx and SO2 emissions are known to be precursors to secondary fine particle creation, our data shows that NOx and SO2 emissions are well within limits. To reduce these further at Mt Piper would require the retrofit of technologies such as Selective Catalytic Reactor (SCR) technology for NOx and Flue Gas Desulphurisation (FGD) for SO2. These were not considered necessary when the Government and EPA approved the Mt Piper design after extensive review of the environment impacts.

The retrofit of new technologies like scrubbers now or in the future would be technically challenging, consume excessive levels of energy and water to operate, and impose a high capital cost. The conversion would create alternative environmental impacts (e.g. increased greenhouse gas emissions and water consumption) that outweigh the benefits. Technologies such as these should only be considered for application to future new build coal fired power stations.

For these reasons, at Mt Piper or Tallawarra, EnergyAustralia considers that any increase in LBL fees would be ineffective in reducing point source pollution and impose unnecessary costs which would increase electricity costs. Given that NSW generators operate in a competitive market, any increase in LBL fees could amplify a market distortion and result in competitive disadvantage relative to competitors in other States.

Efficiency

Energy Australia's coal fired power station is located outside of the Sydney basin and away from the population base. The energy sector should not be required to bear the burden of all other sources of these air pollutants which are many and varied, and in large part natural. Over 50% of the PM2.5 particles can be from naturally occurring sources which cannot be controlled. Any changes to the LBL should be tailored to sources that are problematic, but currently sit outside of the scheme.

Load based fees adopt a polluter pays principle. That is, the level of fees for a polluter is linked to the severity of impacts associated with that polluter's emissions. It therefore requires an understanding of the relative severity of the impact across sources. These impacts can vary significantly according to the characteristics of the receiving environment.

There is much work to be done to understand ambient air particles. EnergyAustralia supports further air particle characterisation studies in the Greater Metropolitan Region of Sydney to better understand the nature and mix of fine particles in regions with elevated levels. This will better identify the major sources and their impacts and would inform development of targeted policies and strategies to address issues of concern. For example, the Lower Hunter particle characterisation study showed particles from industry to be around 10% of the air particles. This information is essential to inform the LBL scheme and the general public.

The health costs of PM emissions from generators is likely to vary by orders of magnitude as population exposure varies markedly from site to site (dependent on direction, distance and how densely populated the residential areas are from the source). The LBL scheme accounts for this variability by having different fees for pollutants that are emitted from specific 'critical zones' and also a higher relative fee level for NOx and VOCs emissions in summer. This structure is unlikely to adequately capture the variability in external costs of electricity generation emissions. If fee levels don't reflect relative external costs, the incentives are not proportional to actual external impacts. This distortion would be exacerbated if fee levels are further increased.

Flexibility

Part 9.3B of the Protection of the Environment Operations (POEO) Act provides the legislative framework for environmental offsets. However, environmental offsets must be approved by the EPA before they can be used to reduce fee liability under the LBL scheme.

It is likely that there would be a range of cost effective opportunities to reduce pollutant impacts outside of reducing on-site emissions from electricity generators. It is also likely that reducing emissions from sources much closer to receptors delivers greater reductions in external costs, than reducing the same quantity of emissions on-site from electricity generators.

We encourage the EPA to investigate the uptake and operation of environmental offset activities to date and consider what opportunities there may be for efficient generators to utilise offsets in lieu of LBL fees.

Equity

It is noted by the Paper that electricity generators contribute the largest share of fee revenue out of all sectors covered by the LBL scheme and this may be an opportunity for further review by EPA to ensure LBL structures are delivering equitable outcomes.

Assessment of equity should also consider that lower income households tend to spend a higher proportion of income on electricity than higher income households. Given this, there is potential for an increase in LBL fees to enhance the burden of electricity costs on low income households in NSW.