

Australian Energy Market Commission

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Emissions Reduction Fund submissions
Safeguard Mechanism Branch
Department of the Environment

By email: emissions-reduction-submissions@environment.gov.au

Dear Sir/Madam

Consultation on the Emissions Reduction Fund Safeguard Mechanism

The Australian Energy Market Commission (AEMC) welcomes the opportunity to make a submission to the Emissions Reduction Fund (ERF) safeguard mechanism consultation paper.

The AEMC has two roles. It makes and amends the rules that govern the National Electricity Market (NEM) and elements of the gas markets. To support energy market development, it also provides advice to the Council of Australian Governments' Energy Council (the "CEC").

The ERF safeguard mechanism is designed to ensure emissions do not rise elsewhere in the economy as the Commonwealth Government is taking action to reduce emissions through the ERF. The level of emissions and the emissions reduction policy framework is of course a matter for the Government. The particular way the ERF safeguard mechanism is designed is however of interest to the AEMC to the extent that it impacts the way the electricity market operates, the effectiveness of its pricing mechanisms, incentives and risk allocation.

The linkages between energy and emissions reduction policies are such that in the Commission's view, the safeguard mechanism needs to be designed with a view to achieving both sets of policy objectives. Without an integrated approach neither the National Electricity Objective nor the Commonwealth Government's emissions reduction objectives are likely to be achieved.

Design proposed in consultation paper

The AEMC therefore supports the Department of the Environment's position to develop a separate safeguard mechanism for the electricity sector and this aspect is the focus of our submission. We note that the Department's position is to implement an initial sectoral

baseline calculated as the average of five years of historical emissions. Our key concerns regarding this approach relate to the impact on dispatch and investment efficiencies if individual baselines for power stations apply.

Electricity consumption is inherently uncertain and significant change in the electricity sector has occurred in recent years due to the uptake of solar PV and energy efficiency measures, as well as the closure of energy-intensive manufacturing. However, annualised electricity consumption in Australia was positive to March 2015 and a return to consistent positive growth in response to liquefied natural gas developments and growth in economic activity should not be discounted; nor should the possibility that electric vehicles become more widespread over the next few years.¹

The differences experienced in recent years between expected and actual electricity demand levels and patterns of consumption, shifts in the relative costs of technologies employed, on the consumer's side of the meter and on the supply side, in addition to that of fuel sources, demonstrate that the future development path of the sector is inherently uncertain. Hence the AEMC would suggest that mechanisms designed to achieve a given policy objective that depends on a particular view of the future are best avoided.

The AEMC would suggest that the design of the safeguard mechanism should be guided by two fundamental principles:

1. That it can meet its policy objectives whatever the future may bring in terms of demand, relative input prices and technological changes; and,
2. It is compatible with the pricing mechanisms used to trade electricity and consistent with the risk allocation and risk management tools that underpin the operation of the market.

Under the design in the consultation paper, in the event that the sectoral baseline is breached, generators have limited ability to shift the compliance burden of individual baselines between themselves. This effectively places a cap on each generation facility and could lead to situations where generators have reached their individual baselines and higher cost and price plant are required to meet demand under the safeguard target.

We also note that, as individual baselines for new investment depend on generators' emissions in the first three years of operation, new entrant generators will have an incentive to artificially inflate their production and CO₂e output to create a higher baseline for the remaining life of the plant. Further, without a corresponding offset in the sector-side baseline, new investment could result in an increase in absolute emissions, resulting in the safeguard mechanism not meeting its objective.

Alternative approach to designing a safeguard mechanism for the electricity sector

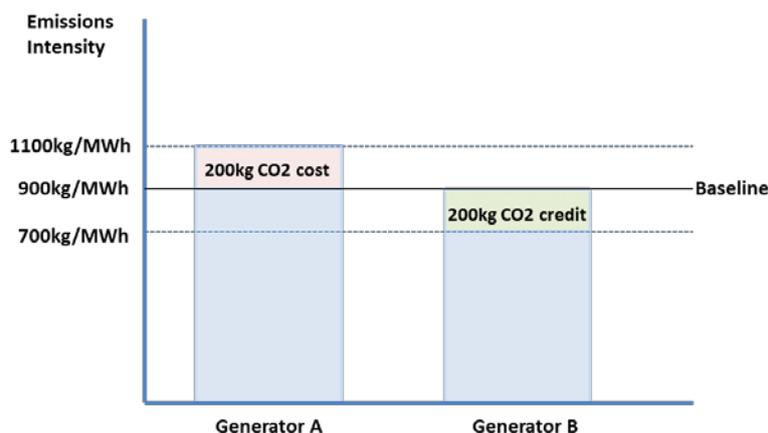
The AEMC considers it important to design a safeguarded mechanism that is not based on one view of electricity consumption growth into the future. The approach should also preserve the market mechanism that facilitates the trading of electricity and allocation of risk in energy markets, while providing the long term regulatory certainty necessary for investors in the sector.

The AEMC has set out an alternative safeguard mechanism approach that maintains dispatch and investment efficiencies, while providing flexibility for the mechanism to evolve. This involves converting the absolute tonnes baseline, as set out in the consultation paper, into an emissions intensity and providing generators with the flexibility to meet the target at the lowest possible cost.

¹ Pitt & Sherry, Electricity emissions update, April 2015.

We refer to this as a closed system, emissions intensity safeguard mechanism. Generators with an intensity below the baseline would create CO₂e credits – termed Australian Electricity Sector Credits (AESCs) – equal to the difference between their emissions intensity and the baseline for every MWh produced. The demand for credits comes from generators above the baseline who purchase AESCs required to reduce their intensity to the baseline, as illustrated below.

Figure 1: Generators below the intensity baseline create credits that those above must procure



The price paid and received for AESCs would be a function of the supply and demand for credits, which in turn depends on the calculation of the emissions intensity baseline, output from low emissions generators that create credits and the potential supply of eligible offsets from other sources – the lower the baseline the higher the price and vice versa. While a lower emissions intensity baseline would require more AESCs to be procured by high emissions generators, increasing the demand for credits, this would be balanced by allowing new entrant renewable generators to create credits.

Multi-year compliance or banking and borrowing could be considered to enhance flexibility for generators to comply.

Overall, wholesale electricity prices, and the resultant price effects on consumers, are minimised under this approach. This is because low emissions generators are rewarded with an additional source of revenue every time they generate, which will be reflected in lower offer prices due to an incentive to ensure they are dispatched in order to create credits. Importantly, however, high emissions generators are only penalised to the extent their emissions intensity is above the baseline, which minimises the cost of meeting the safeguard mechanism target.

In summary, in the event that the sectoral baseline is breached, the emissions intensity safeguard mechanism changes the relative costs of generation technologies so the energy market's normal operations keeps emissions below the baseline, without a significant effect on absolute price levels faced by consumers and potentially less than may be the case with the design suggested by the Department.

The design also avoids complexities with having to allocate individual baselines, while ensuring that risks around new investment and generation exit decisions are appropriately allocated to the businesses and not consumers.

Flexibility is a characteristic of the closed system, emissions intensity approach

Flexibility is an important aspect of any effective longer term emission reduction or energy policy and a key consideration for the AEMC. Under the safeguard mechanism design set out above, there are a number of inherent measures that allow the policy to evolve in line with government and societal objectives, without changing the underlying architecture.

These include:

- **Integration with Large-scale Renewable Energy Target:** Under this approach, renewable energy generators could be allowed to produce either AESCs or Large-scale renewable energy certificates (LRECs) (but not both), promoting least cost emissions reductions. After the LRET plateaus in 2020, the closed system, emissions intensity mechanism could provide the primary signal for new investment in renewable generation and a viable replacement for the LRET.
- **Integration with ERF:** If desired in the future, the government could create a system of tradable allowances between Australian Carbon Credit Units (ACCUs), AESCs and any other prescribed offsets that could be exchanged between generators within the sector, as well as facilities outside of the electricity sector.
- **Setting the intensity baseline:** The design of the baseline is flexible and could be altered without modifying the underlying architecture if government policy objectives were to change.

Governance of an electricity sector safeguard mechanism

Stable and predictable governance arrangements are a key part of ensuring any safeguard mechanism can be expected to meet its policy objective and therefore create the regulatory certainty valued by investors in the electricity sector. An important feature of a safeguard mechanism framework is that it can evolve in line with economic and market developments.

In the AEMC's view, based on its experience in the energy markets, there are key features of governance frameworks that balance the negative impacts of uncertainty associated with regulatory change, against the benefit of a regulatory framework that is sufficiently flexible to respond to changing conditions. These include:

- The consistency of the objectives which policy makers are seeking to achieve.
- The familiarity of affected parties (e.g. consumers, industry) with the process by which regulation is changed and the decision-making criteria applied by the rule-maker.
- Meaningful consultation with affected parties before regulatory changes are made.

In addition to the obligations that all rule makers must meet under Commonwealth law when making legislative instruments, the Department of the Environment may wish to consider:

- Publishing the Minister's proposed approach to consulting on changes to the safeguard rules in the future (e.g. consultation stages and time periods) so that interested parties are aware of how they can engage on any future rule changes; and
- In the case of changes to the safeguard mechanism for the electricity sector, requesting the AEMC (through the CEC) consider the potential impacts of proposed changes to the safeguard rules on the efficiency of investment in and operation of the wholesale electricity market.

In the longer term, there may be an opportunity for the Commonwealth, States and Territories to consider further integration between electricity market regulation and

environmental policy implementation across jurisdictions to minimise costs faced by consumers in energy markets.

The AEMC would be happy to assist the Department of the Environment in identifying and analysing the impact of potential safeguard mechanism designs on energy markets, as well as contribute to further developing the suggested approach outlined in this submission, if requested by the CEC.

The remainder of the submission is structured as follows:

- **Section 1: Proposed electricity sector safeguard mechanism** – discusses the AEMC's views on the design set out in the consultation paper;
- **Section 2: Alternative safeguard mechanism proposal for the electricity sector** – sets out the conceptual framework for an alternative design; and
- **Section 3: Governance** – discusses the importance of a stable and predictable governance and institutional arrangement for the safeguard mechanism.

If you have any questions or require further information please contact Paul Smith, Chief Executive Officer, on (02) 8296 7800.

Yours sincerely

A handwritten signature in black ink, appearing to read 'John Pierce', with a long horizontal stroke extending to the right.

John Pierce
Chairman

Introduction

An emissions reduction policy that is appropriately designed and integrated can minimise the costs faced by consumers in energy markets. An environmental policy that is flexible and has the ability to continue to meet its objective in the face of unknown and changing economic conditions will have a better chance of being sustainable in the long term. This policy sustainability will positively contribute to the regulatory certainty that is critical for investors in the electricity sector.

While we note that setting the emissions target is the role of government, the AEMC is interested in how to design and implement a mechanism to achieve this target most efficiently, while preserving the efficacy of price signals and allocation of risk in the electricity sector.

A consistent and systematic approach to electricity market development is vital to minimising costs for consumers. When undertaking rule changes and market reviews related to the NEM, the AEMC is guided by the National Electricity Objective (NEO).² When applying the NEO, we have regard to a number of high level principles, including that:

1. Competition and market signals will generally lead to better outcomes than centralised planning, as energy businesses have an incentive to meet consumers' needs efficiently;
2. Market and regulatory frameworks should be flexible and provide firms with a clear and consistent set of rules that allow them to independently develop business strategies and adapt to changes in the market. Frameworks should be resilient to changing supply and demand conditions, and patterns of flow, over the long term; and
3. Risk allocation and the accountability for investment decisions should rest with those parties best placed to manage them.

This submission discusses the proposed safeguard mechanism design in the consultation paper, before setting out an alternative suggested approach for the Department's consideration. The final section canvasses our thinking on potential governance options for the safeguard mechanism.

The comments in this submission have been guided by the NEO and the high level principles set out above.

1 Proposed electricity sector safeguard mechanism

The objective of the safeguard mechanism is to ensure emissions do not rise elsewhere in the economy as the government is taking action to reduce emissions through the ERF. Noting the unique characteristics of the electricity industry, the AEMC supports the position put forward by the Department to develop a specific safeguard mechanism for the electricity sector.

The proposed baseline set out in Department's consultation paper has the following characteristics:³

- Calculated on an absolute tonnes basis with reference to historical emissions between 2009-10 and 2013-14 for the electricity sector.
- Applied to grid connected generators who emit above 100,000 t/CO₂e per year.
- If the sectoral baseline is breached, individual facility baselines would apply for the following year and the sectoral baseline would not be re-established.

² In brief, the National Electricity Objective is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity.

³ Department of the Environment, Emissions Reduction Fund: Safeguard mechanisms consultation paper, March 2015, p. 24-25.

- Individual baselines would only apply to generators whose emissions intensity is above the grid average.

In the context of the proposed design, the AEMC notes the Department's approach to calculate a sectoral baseline as the average of five years of historical emissions. As discussed in the consultation paper, this has been proposed to accommodate variability in production levels year-on-year and changes in the generation mix. However, we have some concerns around the impact on dispatch and investment efficiencies for generators if individual facility baselines apply.

Before looking at these potential concerns, we note that exempting generators with an emissions intensity below the grid average from compliance may create a loophole where the sectoral baseline is breached, but all individual facilities are compliant. This could occur in an extreme case where all high-intensity generators emit CO₂ at their baseline, while lower-intensity generators, including combined-cycle gas turbines (CCGTs), exceed their baseline by a large amount.

1.1 Flexibility for generators to meet their individual baselines is limited

If the objective of the safeguard mechanism is to successfully preserve emissions reductions over time, then the design should be sufficiently flexible to adapt to potential future outcomes where the sector-wide baseline is breached. Under the current proposal, we do not consider that this has been achieved.

While electricity consumption and emissions from the sector have declined in recent years, the future is inherently uncertain. We note that for the first time since 2013, annualised electricity consumption growth to March 2015 was positive across Australia, with growth seen in all jurisdictions except New South Wales and Victoria. Emissions from the sector have also been climbing since mid-2014.⁴ A return to consistent positive growth in response to liquefied natural gas developments and growth in economic activity should not be discounted; nor should the possibility that electric vehicles become more widespread over the next few years.

It is within this context that the AEMC is concerned that under the current proposal generators have an inability to shift the compliance burden of individual baselines between themselves, if the sectoral baseline is breached. Allowing generators to trade their baseline obligations provides flexibility within the sector to shift production across a large fleet in response to constraints, local demand and other economic considerations.

Placing a cap on each facility could hinder the reliable operation of the system and potentially result in dispatch inefficiencies. This may occur when lower cost and price generators approach their emissions baselines and choose not to emit even though it may be efficient for them to do so from a wholesale electricity price perspective, resulting in higher cost and price plant being otherwise dispatched to meet demand. These costs are ultimately borne by consumers, while the same outcome of safeguarding emissions could be achievable under a more flexible approach.

We note that the proposed design includes a three year compliance period, which allows generators to exceed their individual baselines in one year if their average over the three years is below. While this mechanism will moderate some of the impacts on efficiency discussed above, it could create uncertainty around the behaviour of generators in year three if their individual baselines are exceeded in years one and two. This could occur due to a combination of, say, unplanned outages from other generators and higher demand due to unseasonal weather.

Notwithstanding this, if the Department considers there is merit in allowing generators to trade individual baselines, there are complex issues to resolve around how individual baselines are allocated, such as free allocations or through auctions. As individual baselines are effectively an economic property right to emit, they have a value that increases with the scarcity of the units. The

⁴ Pitt & Sherry, Electricity emissions update, April 2015.

existence of this value can result in wealth transfers between generators and consumers, and create inefficiencies around new investments and retirements.

1.2 Investment and retirement

Initial baselines for new investment and major expansions are proposed to be set based on the average emissions intensity “of the top 10 per cent of Australian industry peers”, multiplied by the highest expected production over the first three years of operation. After this time, the baseline would be adjusted to reflect the highest actual production over that period.⁵

We note that this approach is likely to create dispatch inefficiencies in that generators will have an incentive to artificially inflate their production and CO2 output over the first three years in order to create a higher baseline allocation for the remaining life of the plant. Following on, without a corresponding offset in the sector-side baseline, new investment could result in an increase in absolute emissions, resulting in the safeguard mechanism not meeting its objective.

A critical aspect of the safeguard mechanism is whether it is likely to create a barrier to exit that would result in facilities remaining operational when they otherwise would have closed. Barriers to exit in this context depend on the value of the baseline and whether this is easily transferrable to another entity, so as to ensure generators do not remain operational just to collect their baseline allocation. From the detail provided in the consultation paper, it was unclear whether the proposed approach would result in a barrier to exit or whether generator retirements would result in commensurate reductions in the sectoral baseline.

An alternative approach to designing a safeguard mechanism that avoids allocating baseline allowances and preserves dispatch and investment efficiencies in the electricity market is discussed below.

2 Alternative approach to designing an electricity sector safeguard mechanism

Price signals in the NEM are critical to market participants making efficient decisions. Short term dispatch and long term investment decisions are driven primarily by wholesale prices or derivative prices in the contract market. If prices are influenced by external factors unrelated to supply and demand, this can result in an inefficient mix of generation being dispatched. Over the longer term, it can result in an inefficient level of investment in capacity, increasing costs for consumers.

Emissions reduction policies that are appropriately designed and integrated with energy markets can preserve the efficacy of price signals, minimise distortions and achieve their objectives at least cost for consumers. For this to occur, an emissions reduction policy should also provide as much investment certainty to the electricity industry as possible through an ability to be flexible and resilient in the face of changing economic conditions and emissions safeguard targets.

When contemplating the effective integration of energy and environmental policy, the AEMC considers it important to design a mechanism that will achieve the government’s emissions safeguard target while preserving the market mechanism through which electricity is bought and sold. In this respect, we note the following factors are worth considering:

1. The National Electricity Objective – explicitly accounting for the impact on wholesale and retail prices to reflect the underlying demand and supply conditions in the NEM, any reductions in efficiency in electricity markets and the long term impacts on consumers.

⁵ Department of the Environment, Emissions Reduction Fund: Safeguard mechanisms consultation paper, March 2015, p. 27-28.

2. Sustainable design – investors need a level of confidence that policy objectives can be met and are sufficiently robust to adjust to changes in market conditions. Without this confidence, investment will not be forthcoming.
3. Flexibility to adapt – for a policy to be sustainable there needs to be a reasonable opportunity to adapt to material changes in the market and regulatory landscapes, in a predictable and consistent manner. The policy should not be predicated on one view of the future.
4. Technology neutral – a policy that allows the greatest number of technology options is likely to minimise costs for consumers.

Taking these factors into account, an alternative safeguard mechanism is suggested below that we consider would maintain the efficacy of price signals in the wholesale market, while promoting technology neutrality and exhibiting sufficient flexibility and resilience to be effective and provide investment certainty over the long term.

The suggested approach involves converting the absolute tonnes baseline into an emissions intensity level and providing generators with the flexibility to meet the safeguard target at the lowest possible cost. A conceptual design of what we call a closed system, emissions intensity safeguard mechanism for the electricity sector is set out below.

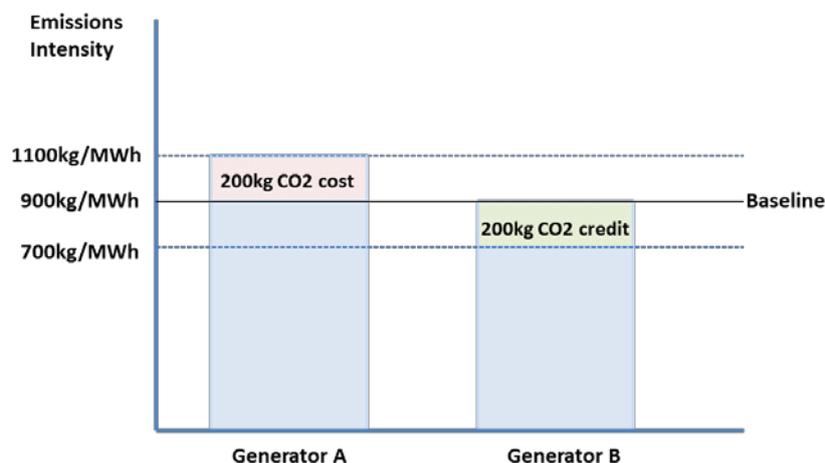
2.1 Closed system, emissions intensity safeguard mechanism for the electricity sector

Under a closed system, emissions intensity approach, the absolute tonnes CO₂e baseline set by the government would be converted into an emissions intensity target that would act as the baseline.

Generators with an emissions intensity below the baseline would create AESCs equal to the difference between their emissions intensity and the baseline for every MWh of electricity produced. The demand for credits comes from generators above the baseline who purchase the number required to reduce their intensity to the baseline. This design results in a closed system specific to the generation sector where facilities have the flexibility to meet the electricity sector safeguard target in a least cost manner by creating and purchasing credits between themselves.

Figure 3 shows a stylised example of two generators to illustrate how this approach might work. Generator A has an emissions intensity above the baseline and purchases 200 kg of AESCs per MWh in order to reduce its intensity below the baseline. Generator B has an emissions intensity of 700 kg and creates 200 kg of AESCs per MWh that are available for sale to Generator B.

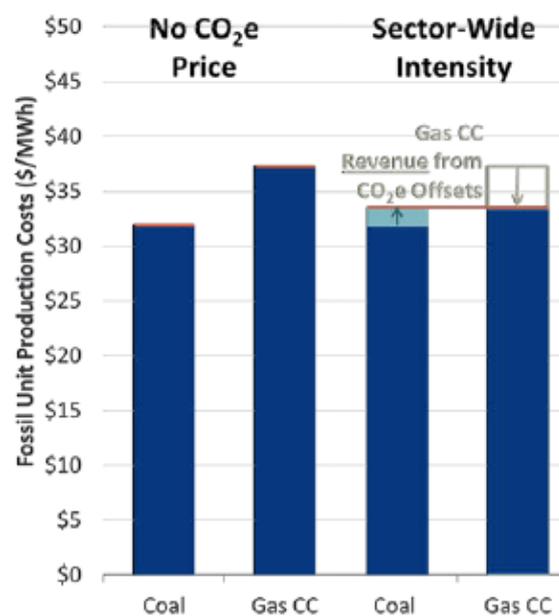
Figure 3: Generators below the intensity baseline create credits that those above must procure



The price paid and received for the AESCs will be a function of the supply and demand for credits, which depends on the calculation of the emissions intensity baseline, output from low emissions generators that create credits and the supply of eligible offsets from other sources, such as ACCUs. A lower intensity baseline would require more AESCs to be procured by high emissions generators, increasing demand, although this could be balanced by allowing new entrant renewable generators to create credits.

The impact on wholesale electricity prices of this approach can be to increase or decrease prices. High emitting generators will increase their offer prices based on the cost of AESCs, but this will be offset by lower emissions generators decreasing their offers by the additional revenue earned through creating and selling AESCs when they run. This is illustrated in **Figure 4**.

Figure 4: Stylised example of how increases in wholesale electricity prices are minimised under a closed system, emissions intensity safeguard mechanism



Overall, wholesale electricity prices, and the resultant effects on consumers, are minimised under this approach. This is because low emissions generators are rewarded with an additional source of revenue every time they generate, which will be reflected in lower offer prices due to an incentive to ensure they are dispatched in order to create credits. Importantly, however, high emissions generators are only penalised to the extent their emissions intensity is above the baseline, which minimises the cost of meeting the safeguard mechanism target.

Wealth transfers and distortions to other parts of the electricity supply chain are also minimised. This is because revenue transfers primarily occur between generators, with the costs of the scheme passed through to consumers in wholesale electricity prices, negating the need for retailers to participate and the associated regulatory and compliance costs.

As the mechanism applies to all technology types equally relative to their emissions intensity, this promotes dispatch efficiency – a least cost generation mix to meet the safeguard target. Wholesale electricity prices, combined with the AESC price, should signal the most efficient amount and type of generation capacity to meet demand and the safeguard target at least cost. This safeguard design also avoids potential pitfalls associated with having to allocate baselines, as discussed above, and ensures that risks around new investment and generation exit decisions are appropriately allocated to the generation businesses and not consumers.

Specific aspects of this potential approach are set out below.

2.1.1 Baseline measurement, coverage and allocation

- A sector-wide baseline for the electricity sector fixed as a five-year historical average of emissions between 2009/10 and 2013/14, as per the Department's consultation paper.
- The baseline could apply to all facilities with direct emissions above 100,000 tonnes of CO₂e per year (as per the consultation paper), regardless of asset class or status as existing or new.
- Convert the sector-wide baseline into an emissions intensity rate in kg of CO₂e per MWh of electricity generated each year minus energy anticipated to be supplied by small generators not covered by the safeguard mechanism and renewable generation supported by the Renewable Energy Target).

2.1.2 Compliance

- Thermal generators with emissions intensities above the baseline, and who are covered by the safeguard mechanism, would be required to surrender sufficient AESCs to reduce their rate below the baseline.
 - If the baseline is 900 kg/MWh, then a thermal generator with an intensity of 1200 kg/MWh would need to procure and surrender 300 kg of credits for every MWh generated.
- Thermal generators with emissions intensities below the baseline, and who are covered by the safeguard mechanism, create AESCs equal to the difference between their emissions intensity and the baseline for every MWh produced.
 - A CCGT emitting 500 kg/MWh would produce 400 kg of AESCs for every MWh.
- No AESC credits exist at the start of the compliance period, but are steadily created by low emitting generators and purchased by high emitting generators. If insufficient AESCs are being created relative to demand, the resulting increase in AESC prices would induce switching to lower emissions intensity technologies.
- As envisaged in the Department's consultation paper, generators could also surrender eligible emissions offsets through the use of ACCUs generated by ERF projects.
- Multi-year compliance or banking and borrowing could be considered to promote flexibility for generators to comply, subject to any concerns around participants taking advantage of this flexibility to manipulate market outcomes.
- As a last resort, the regulator could apply to a court to have the obligation enforced or seek the application of a civil penalty (as per the consultation paper proposal).

2.1.3 Flexibility measures inherent in the design

Flexibility is an important aspect of any sustainable environmental or energy policy and a key consideration for the AEMC. Under the safeguard mechanism design set out above, there are a number of inherent measures that allow the policy to evolve in line with government and societal objectives, without changing the underlying architecture. These are set out below.

- **Integration with RET:** Under this approach, large-scale renewable energy generators could be allowed to produce either AESCs or LRECs (but not both), promoting least cost emissions reductions.
 - Renewable generators would choose to sell into either the AESC or LREC market, creating a more level playing field between renewable and low-emission thermal generators, where the lower-cost approach for meeting the safeguard mechanism constraint would be the most economically viable resource type.
 - After the LRET plateaus in 2020, this type of approach could provide the primary signal for new investment in renewable generation and a viable replacement for the LRET.

- **Integration with ERF:** If desired in the future, the government could create a system of tradable allowances between ACCUs, AESCs and other credits that can be exchanged between generators within the sector, as well as facilities outside of the electricity sector.
 - This would allow generators to meet their safeguard mechanism obligations at least cost and provide an option to sell offsets outside of the electricity sector if the sector could produce them at a lower cost than other areas of the economy.
- **Setting the intensity baseline:** The design of the baseline is flexible and could be altered without modifying the underlying architecture if government policy objectives were to change.
 - The emissions tonnage calculation that feeds into the intensity baseline could be progressively updated on a rolling five year basis (but without exceeding the original baseline cap). This would prevent the intensity baseline rising too high and nullifying incentives on generators in an environment of falling energy consumption.
 - We also note that extending the mechanism from one that safeguards emissions to one that reduces emissions would simply require a change in methodology for determining absolute tonnes of emissions in the intensity baseline calculation.

3 Governance of an electricity sector safeguard mechanism

Governance arrangements are a key part of ensuring any safeguard mechanism can be expected to meet its policy objective and therefore create the regulatory certainty valued by investors in the electricity sector.

Rules and regulations govern the commercial behaviour of participants. Uncertainty and instability around rule changes can result in a decline in trust and confidence that the safeguard mechanism will meet its objective. This can hinder its ability to safeguard emissions at least cost, resulting in doubt around the sustainability of the mechanism over time. If this occurs, investors will be reluctant to continue to commit capital to the sector if they consider the regulatory ‘goal posts’ will change, potentially resulting in adverse outcomes for consumers.⁶

Rules become uncertain when they are constantly adjusted to achieve multiple specific outcomes in an unpredictable manner. Relatively frequent rule changes, as can be seen in the NEM and gas markets, are likely to be less harmful if the rule change process exhibits stability. For instance, energy market participants, who themselves submit rule changes, are:

1. Aware that the rules governing the energy markets are likely to change as the markets grow and mature, however, the fundamental objective of the markets, which is efficiency in the long term interest of consumers, is consistent; and
2. Familiar with the rule change process and the decision making criteria applied by the statutory body tasked with achieving the government’s objective (in this case the AEMC).

An important feature for the safeguard mechanism framework is that it is flexible enough to change in the light of changing economic conditions. In the AEMC’s view, based on its experience in the energy markets, there are some key features of governance frameworks that assist in balancing the negative impacts of uncertainty associated with regulatory change against the benefits of regulatory frameworks that have the flexibility to respond to changing conditions. These include:

- The consistency of the objectives which policy makers are seeking to achieve.
- The familiarity of affected parties (e.g. industry, consumers) with the process by which regulation is changed and the decision-making criteria applied by the rule-maker.

⁶ For a discussion on the impact of institutional stability and disorder on the effectiveness of markets see: Yarrow, G., *The political economic of markets*, Essay in regulation, Regulatory Policy Institute, April 2015.

- Meaningful consultation with affected parties before regulatory changes are made.

In addition to the obligations that all rule makers must meet under Commonwealth law when making legislative instruments, the Department of the Environment may wish to consider:

- Publishing the Minister's proposed approach to consulting on changes to the safeguard rules in the future (e.g. consultation stages and time periods) so that interested parties are aware of how they can engage on any future rule changes; and
- In the case of changes to the safeguard mechanism for the electricity sector, requesting the AEMC (through the CEC) to consider the potential impacts of proposed changes to the safeguard rules on the efficiency of investment in and operation of the wholesale electricity market.

In the longer term, there may be an opportunity for the Commonwealth, States and Territories to consider further integration between electricity market regulation and environmental policy implementation across jurisdictions to minimise costs faced by consumers in energy markets.

The existing governance arrangements for energy markets provides a precedent for national arrangements which provide a clear allocation of responsibility between governments and market institutions, who are charged with meeting a single, unambiguous objective: efficiency in the long term interest of consumers. This, combined with a stable and predictable rule change process, contributes positively to the objective being met and reinforces the sustainability of the governance arrangements.