Ms. Anthea Harris
CEO Climate Change Authority
GPO Box 1944
Melbourne VIC 3001

By email to submissions@climatechangeauthority.gov.au

14 November 2012

Dear Ms. Harris,

Submission to review of the Renewable Energy Target review discussion paper

Enclosed is our submission to the abovementioned review. We encourage the Authority to consider the recommendations we have made and would be happy to discuss them with you or your staff in person.

Should you have any enquiries regarding this matter please do not hesitate to contact myself on +61 3 9617 8300 or Greg Hannan on +61 3 9617 8405.

Yours sincerely,

Stephen Orr
Director Strategy and Regulation
GDF SUEZ Energy Australia

Level 33, Rialto North Tower, 525 Collins Street
Melbourne, Victoria 3000, Australia
Tel. +61 3 9617 8400 Fax +61 3 9617 8401
www.gdfsuezau.com
ABN 59 092 560 793

Submission to the Climate Change Authority Renewable Energy Target Review discussion paper

14 November 2012

Level 33, Rialto North Tower, 525 Collins Street
Melbourne, Victoria 3000, Australia
Tel. +61 3 9617 8400 Fax +61 3 9617 8401
www.gdfsuezau.com
ABN 59 092 560 793

1 Executive summary

GDF SUEZ Energy Australia (GDFSEA), including its retail business Simply Energy, has actively engaged with the Federal Government on the design and implementation of greenhouse gas abatement and renewable energy policy, and now welcomes the opportunity to comment further on the Renewable Energy Target Review (RET) through the discussion paper released by the Climate Change Authority (Authority).

Our response to the discussion paper is guided by our earlier submission to the issues paper where we recommended retention of the RET to provide certainty for renewable investment, but where we suggested several changes to the overall scheme design as follows:

- Creating a single scheme that does not discriminate between large and small scale technologies;
- Reducing the overall renewable energy target by levelling off the current trajectory for large scale and small scale renewable generation to reflect the impacts of changes in demand and carbon legislation, while not impairing existing projects or projects for which finance, approvals and contracts are in place for construction; and
- Maintaining the modified trajectory to 2030 to ensure that existing projects are not harmed financially.

GDFSEA acknowledges that the Authority has made several recommendations to improve the administrative components of the RET, but interprets the discussion paper reflecting the Authority's intent to leave the broad design of the scheme intact.

The decisions to leave the RET design largely untouched appears to have been guided by a commitment to providing stability and confidence for renewable investors. However, we suggest that this is delivered at the expense of incumbent investors and the wider economy through market distortion and costly forms of greenhouse gas abatement respectively. The discussion paper demonstrates how expensive greenhouse gas abatement attributed to the RET is, and even then, GDFSEA believes that these costs have been grossly under-reported.

The RET affects all investors in Australia's electricity sector whether they be long-standing incumbents, relatively recent investors or prospective investors. With the introduction of carbon pricing in Australia, the justification for continuing to pursue high-cost forms of abatement diminishes. To seek investment certainty for one group of technologies by maintaining a market distortion for another group of (currently incumbent) generators is inconsistent, and undermines the broad policy requirement to ensure certainty for the investors that will ultimately deliver the assets needed to change the carbon intensity of Australian electricity production. Consequently, we encourage the Authority to revisit a number of its initial recommendations regarding design of the RET.

2 About GDF SUEZ Energy Australia

GDF SUEZ Energy Australia (GDFSEA), formerly International Power-GDF SUEZ Australia, is wholly owned by GDF SUEZ S.A. and a business line of GDF SUEZ Energy International.

GDF SUEZ Energy International is responsible for GDF SUEZ's energy activities in 30 countries across six regions worldwide (Latin America, North America, UK-Europe, the Middle East, Turkey & Africa, Asia and Australia). Together with power generation, we are also active in closely linked businesses including downstream LNG, gas distribution, desalination and retail. GDF SUEZ Energy International has a strong presence in its markets with 77 GW gross capacity in operation and a significant programme of 10 GW gross capacity of projects under construction as at 30 June 2012. The business has more than 11,000 employees and generated revenues of €16.5 billion in 2011.

In Australia, the company owns and operates 3,500MW (gross) of renewable, gas-fired and brown coal-fired plants in Victoria, South Australia and Western Australia. Our retail business, Simply Energy, has more than 300,000 electricity and gas accounts in Victoria and South Australia.

3 Response to issues paper

In its submission to the issues paper GDFSEA recognised that ensuring policy settings are appropriate for current and future conditions, while still providing the stable legislative and regulatory framework imperative for attracting and providing certainty to the necessary investment in large scale capital intensive power generation infrastructure (renewable or otherwise), presents a policy challenge.

Over $6 billion has been invested to date in renewable generation, and in making those commitments, investors (both Australian and international) have relied on the Renewable Energy Target (RET) legislation remaining in effect.

However, in its own way, that the Clean Energy Future package undermined investments made in good faith in the Australian energy market, and ongoing dramatic changes to renewable energy in Australia have the potential to raise sovereign risk concerns for investors.

For this reason alone, in order to protect investments made under the various RET legislation, GDFSEA recommends that the RET continue to operate until 2030.

However, in light of passage of the Clean Energy Future legislation and other developments related to renewable energy policy in Australia it remains the view of GDFSEA that it was timely for the Climate Change Authority to recommend a number of changes to policy settings related to the overall RET framework.

GDFSEA argued for the following changes to policy settings:

1. That there be a single market-based renewable energy target in Australia which does not discriminate between small or large scale technologies.
2. Reducing the overall renewable energy target by levelling off the current trajectory for large scale and small scale renewable generation to reflect the impacts of changes in demand and carbon legislation, while not impairing existing projects, or projects for which finance, approvals and contracts are in place for construction.
3. Maintaining this modified trajectory to 2030 to ensure that existing projects are not harmed financially.

4. That the Authority as part of its discussion paper due in October 2012 consider the cumulative impact on electricity bills that the RET has had since 2001.
5. Preventing publically funded organisations such as the Clean Energy Finance Corporation (CEFC) and the Australian Renewable Energy Agency (ARENA) from being able to finance renewable projects that are already commercially viable and participate in the RET, all in order to avoid further market distortion.
6. That the renewable power percentage (RPP) be declared at the very latest by the start of the last quarter of the year preceding the year of liability, ie. changed from an ex-post target to ex-ante target.
7. That SRES be limited to generation technologies and that displacement technologies continue to be excluded.
8. That the use of deeming be reviewed and at a minimum, the use of 15-year deemed profiles be phased out.

GDFSEA is pleased that the Authority has accepted recommendations 6 and 7 listed above but we are disappointed that the remainder have largely been ignored in the discussion paper.

4 Policy principles

GDFSEA, including Simply Energy, has actively engaged with the Federal Government on the design and implementation of greenhouse gas abatement and renewable energy policy, and now welcomes the opportunity to comment on the RET discussion paper released by the Authority.

The current review of the RET is broad-ranging and focusses on detailed implementation issues as well as issues related to the role, need and design of the RET. We offer perspectives across this full policy spectrum.

Our arguments are based on adherence to the following policy principles:

- A stable regulatory and legislative environment that underpins investor confidence in large scale capital intensive infrastructure, whether it be renewable generation or fossil-fired generation.
- Policies which to the greatest extent possible rely on market-based mechanisms.
- Transparent objectives from Government in relation to climate change and energy policy.
- Avoiding the distortionary impacts of subsidies to particular technologies on the investment environment or "picking winners."
- Where changes to policy settings occur, that these must not be retrospective and that sufficient grandfathering provisions are in place to protect investments made in good faith under earlier regulatory and legislative frameworks.

5 Response to discussion paper recommendations

GDFSEA makes the following comments to specific recommendations in the discussion paper.

Chapter 3 – Role of the Renewable Energy Target

1. *The preliminary view of the Authority is that the frequency of scheduled scheme reviews be amended from every two years to every four years, so that the next review would be in 2016.*

GDFSEA response

In the interests of regulatory stability, less frequent reviews would normally be supported. However, given our reservations about many of the key design aspects of the RET we support having the next review in 2014 rather than 2016.

Chapter 4 – The Large-scale Renewable Energy Target

2. *The preliminary view of the Authority is that the form of the target should continue to be expressed in legislation in terms of a fixed GWh level.*
3. *The preliminary view of the Authority is that the existing large-scale renewable target of 41 000 GWh and interim targets should be maintained in their current form.*
4. *The preliminary view of the Authority is that the Renewable Energy Target Review in 2016 is an appropriate time to consider adjusting the targets beyond 2020 in light of the policy and economic conditions prevailing at that time.*

GDFSEA response

GDFSEA recommends that the total target for renewables in Australia **be reduced** to recognise the distortionary impact that 45+TWh of renewable generation is having on electricity markets, and given the recent changes to actual and forecast electricity demand in Australia. It would also further erode market opportunities for non-subsidised investment in Australian electricity generation which threatens long term reliability of electricity supply.

GDFSEA supports maintaining a fixed energy target (in GWh) for renewables to provide investment certainty. Reducing the RET target by levelling off the current trajectory provides the opportunity to avoid impairment of existing projects or projects for which finance, approvals and contracts are in place for construction.

Any changes to the overall RET must be communicated to the marketplace well in advance of their implementation. Lowering the overall RET, if done in an open, progressive and transparent manner and accompanied by sound justifications, investor confidence can be maintained.

Revising the target and an accompanying trajectory without impacting existing investors and then leaving this in place will provide investors and financiers with the highest confidence. Ensuring that the target and trajectory are also no longer affected by external distortions (such as occurred through solar multipliers) is also an essential precondition for maintaining investment and regulatory certainty.

If these transitional conditions cannot be met, the requirement for investment certainty is preeminent, and the RET target should be unchanged.

Chapter 5 – Small-scale Renewable Energy Scheme

8. *The preliminary view of the Authority is that discounting (multipliers of less than one) of the number of certificates to be created in respect of each megawatt hour be provided to allow the Minister to control the cost of the SRES and ensure the subsidy level is appropriate.*

9. *The preliminary view of the Authority is that a decision to apply or lower a discount factor should be applied in the following manner:*

   - *The Minister should consider whether to lower the discount factor at the time the small-scale technology percentage is set each year.*
   - *The Minister's decision should be based on, and proportional to, the following criteria: (i) any reduction in net system costs over the last year; (ii) electricity prices and whether the SRES contribution is greater than 1.5 per cent; and (iii) whether the average payback period of a small-scale system has fallen below ten years.*
   - *In making the decision, the Minister must obtain and take into consideration independent data surveys regarding the above criteria. The survey results should be published.*
   - *If the Minister decides to lower the discount factor, the Minister should provide reasons regarding the weighting of each element.*

GDFSEA response

GDFSEA strongly opposes the use of multiplying factors. In our view these are used as a distortionary instrument. The discussion paper acknowledges the heavy costs associated with the SRES scheme and yet proposes that the Minister be responsible for controlling these.

Our preference has been to merge the large and small scale schemes.

The current design of the SRES represents an uncapped liability for retailers and their customers because there is a payment for SRECs with no volume cap. This incentivises installers to roll out as many installations as they can. (This same uncapped liability issue has been confronted by State Governments who recognised that without volume limits, feed in tariff (FIT) schemes were financially unsustainable).

Australia has paid a premium for early entry of rooftop solar PV which could have been better spent more efficiently e.g. more panels later on and/or different technologies early on. The highest principle should be that the least cost (risk adjusted) path be relied on to achieve the desired policy objectives.

The uncapped SRES increases the scheme liability beyond the original intended target. This increases the cost to consumers beyond what was originally accepted. It also means liable entities' individual targets are difficult to forecast. This risk also leads to increased cost impost to customers. This is an inequitable outcome, because all customers face this impost through their electricity bills, cross subsidising those who are able to benefit from the scheme.

Rather than relying on multipliers less than one, the Authority should recommend that a volume cap be placed on the SRES scheme to minimise total costs to households.

Chapter 6 – Liability and exemption framework

12. *The preliminary view of the Authority is that large electricity consumers should be able to opt in to assume direct liability for Renewable Energy Target obligations. The Authority will consult further with participants and the Clean Energy Regulator on a workable model for opt-in arrangements.*

14. *The preliminary view of the Authority is that the renewable power percentage and small-scale technology percentage should be required to be set prior to a compliance year, and preferably by 1 December of the preceding year.*

15. *The preliminary view of the Authority is that the current arrangements for surrender of certificates (annual surrender for the Large-scale Renewable Energy Target; quarterly surrender for the Small-scale Renewable Energy Scheme) should be maintained.*

16. *The preliminary view of the Authority is that the current settings for the shortfall charges should be maintained. However, the level of the shortfall charge should be reconsidered by the Authority as part of its 2016 review of RET targets beyond 2020, or earlier if circumstances warrant it.*

GDFSEA response

GDFSEA strongly supports allowing large electricity consumers "opt in" and assume direct liability for their RET liability, and having a renewable power percentage set by 1 December in the year before the year of compliance.

Chapter 7 – Eligibility of renewable energy under the Renewable Energy Target

27. *The preliminary view of the Authority is that existing arrangements for displacement technologies should be maintained.*

28. *The preliminary view of the Authority is that no change should be made to the REE Act to allow additional displacement technologies.*

GDFSEA response

GDFSEA supports the recommendations to not allow further displacement technologies into the RET.

Chapter 8 – Diversity of renewable energy under the Renewable Energy Target

29. *The preliminary view of the Authority is that no change should be made to the Renewable Energy Target framework to promote diversity.*

GDFSEA response

GDFSEA supports this recommendation but notes that the existence of separate large and small scale schemes is in itself a commitment to diversity.

Chapter 9 – Small-scale scheme administrative issues

30. *The preliminary view of the Authority is that the small-scale accreditation system should be open to accreditation bodies other than the Clean Energy Council. Provision should be made for the Clean Energy Regulator to develop to develop a regime to approve accreditation bodies.*

31. *The preliminary view of the Authority is that wind and hydro products should require accreditation to be eligible to create certificates.*

32. *The preliminary view of the Authority is that the existing deeming arrangements remain appropriate.*

GDFSEA response

GDFSEA supports greater competition in the area of small-scale accreditation.

Reliance on deeming raises the risk that payments are made for certificates which may never actually be generated. For example, the uncapped nature of SRES encourages installers to compete for market share by maximising the up-front subsidy to customers. This typically is achieved via the 15-year deemed profile where a household transfers fifteen years of certificates to the installer on the day the rooftop PV solar panels are fixed to their roof. This creates an over-supply of SRES certificates and encourages cash-constrained installers to sell these certificates at a discount to the SRES certificate price cap of $40.

There is also a real risk that installations do not operate for the life of the deemed profile, or at the nameplate capacity. This risk is heightened where installers have used cheaper and lower quality panels, inverters and other equipment. Since rooftop PV solar installations are exposed to the elements, there is a real risk that there will be equipment faults or progressive reduction in performance which result in significant discrepancies between deemed and actual output. In this instance, customers would literally be paid (by other consumers) for something which does not exist.

To address this issue, GDFSEA argues that overly generous deeming provisions be replaced by a system which relies on testing and inspection of systems prior to SREC's being issued for either a three or five period.

6 Further response to discussion paper

GDFSEA raises the following additional comments on aspects of the Authority's discussion paper.

6.1 Impact of the RET on the wholesale electricity price

The discussion paper notes that the RET has had a depressive effect on wholesale prices and that this has led to a reduction in retail prices. This is because the RET forces in new supply irrespective of whether this is needed from a demand perspective or not.

Superficially, this outcome may seem desirable. However, the benefit to end consumers is transient (a) because they have to pay for the distortion to be implemented, and (b) because the long-term effect is to harm investment. For generation businesses that rely exclusively on the wholesale electricity market to recover both short-run and long-run costs this impact is financially damaging. This risk is impossible to manage by the generators and increases the level of uncertainty for all investors in generation. The end game is for generator investment to dry up over time, and/or financing costs to

increase to compensate for the additional risks with higher wholesale prices the result. Clearly such an outcome is not in the long term interests of electricity consumers.

In the context of static electricity demand growth, a number of generation businesses have withdrawn or "mothballed" capacity in response to an over-supplied market. For example, two units have been mothballed at Tarong power station in Queensland, one unit at Yallourn power station in Victoria has been mothballed and Playford power station has closed and Northern power station in South Australia will now only generate in summer when demand is highest.

This is an example of how the RET, in satisfying one public policy objective (renewables), undermines another (productivity improvement), leads to economic inefficiencies due to idle plant being maintained and retaining skilled staff to run plant if needed, and creates poor signals for new investment as potential new investors will be aware that mothballed plant could be recalled, which reduces the incentive to invest in new plant.

The discussion paper has recommended little change on the basis of maintaining stability and investor confidence for the large and small scale renewable sector, notwithstanding its endeavour to maintain investment certainty in the renewables space. GDFSEA argues that this is an unbalanced approach and fails to consider the impact of the RET on long-standing investors in Australia's energy markets.

The Authority must understand that to continue to allow the RET to impact on wholesale markets undermines the long-term sustainability of those markets and discourages new investment in generation in Australia, of all types.

6.2 Cost of abatement

The objectives of *The Renewable Energy (Electricity) Act 2000 (Cth)* (REE Act) are to:

- Encourage the additional generation of electricity from renewable sources;
- To reduce emissions of greenhouse gases in the electricity sector; and
- To ensure the renewable energy sources are ecologically sustainable.

GDFSEA notes that the review being conducted by the Authority must be consistent with the objectives of the REE Act.

Coupling the policy objectives of greenhouse gas abatement and deployment of renewables together is problematic particularly since the principles the Climate Change Authority must consider in undertaking their review include the impact of the RET is having on households, business, workers and communities and whether it is economically efficient. With a legislated carbon price now in place this problem is compounded. From the perspective of economic efficiency, least cost greenhouse abatement should be driven only by the price on carbon. If renewables are competitive and produce the lowest cost outcomes for consumers, then they will be built.

Even with a legislated carbon price, renewable deployment still remains contingent on the subsidies provided through the RET. Government must be aware that while the RET relies on market mechanisms, it primarily relies on a mandated target to deploy renewables. In the context of the suppressed demand growth currently being seen in Australia, forcing renewables into the market suppresses spot market prices, erodes the viability of incumbent generators of all types, and undermines investment certainty in merchant generation that is non-subsidised and market facing.

The inconvenient truth of renewable policy is that renewables do not currently represent least cost greenhouse abatement at current global carbon prices, nor are they the new entrant generator of choice

on an economic basis. This issue is increasingly being recognised globally in debates about renewables. For example, Dieter Helm, Professor of Energy Policy at Oxford University and Fellow in Economics at New College, Oxford recently illustrated this point in the context of UK energy and renewable policy[1].

If we accept that the RET does satisfy the policy objective of renewable deployment, this then raises questions about its interaction with carbon pricing policies, and also its direct consequences for the sustainability of a competitive national electricity market.

6.3 Modelling error

On a related front, we believe that the modelling relied on by the Commission has failed to correctly calculate the cost of abatement that the RET delivers.

The various estimates of RET abatement costs that are stated or that can be derived in the report appear to be based on a methodology of discounting costs but not the emissions abated.

This is highlighted on p. 66 of the discussion paper in Table 7 where the difference between results for the reference case 1 scenario and the updated 20% target scenario leads to an average cost of abatement of $47 per tonne of CO_2-e.

From a theoretical economic perspective, if costs are discounted to a present value then emissions abated must also be discounted and converted to a present value. To do otherwise grossly understates the cost of abatement.

The table below considers the difference in costs between the reference case 1 scenario and the updated 20% target scenario and shows that the correct economic cost of abatement is $87 per tonne of CO_2-e and not the incorrect and misleading $47 per tonne of CO_2-e[2]. The correct treatment is to divide the difference in the present value of resources costs with the present value of difference in emissions abated.

Table 1 – Difference in costs between the reference case 1 scenario and the updated 20% target scenario

	Unit	Reference Case 1	Updated 20% target	Difference	Cost of abatement ($/tonne CO_2-e)
NPV resource costs	$M	$116,287	$111,926	$4,360	n/a
Discounted value of emissions abated	Mt CO2e	1,938	1,988	50	87
Arithmetic sum of emissions abated	Mt CO2e	3,586	3,679	94	47

In the context of the discussion paper GDFSEA concludes that the cost of abatement is therefore much greater than that considered by the Authority.

By way of assurance, we note that a correct approach was used by the Bureau of Resources and Energy Economics (BREE) in the 2012 Australian Energy Technology Assessment (AETA) report where a levelised cost of electricity was calculated for forty different generation technologies[3]. In this

[1] See http://www.dieterhelm.co.uk/sites/default/files/Huhne_hype_060212.pdf

[2] Using a discount rate of 7% as used in the Authority's modelling

[3] See Section 2.4 of the 2012 Australian Energy Technology Assessment report at http://www.bree.gov.au/documents/publications/aeta/Australian_Energy_Technology_Assessment.pdf

case the levelised cost was based on the discounted value of both the financial costs and the physical quantities, which for the AETA report was energy generated.
