

6 June 2008

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Charles Chauvel  
Chair Finance and Expenditure Select Committee  
Parliament Buildings  
WELLINGTON

Dear Charles

**Response to advice from officials on the PCE recommendations concerning the Renewable Preference part of the Climate Change Bill**

I have received a copy of the report from the Emissions Trading Group responding to my advice on the Renewable Preference part of the Climate Change Bill. This letter clarifies my position with regard to this report and the proposed amendments to the bill.

In my advice to the committee, I stated *“The exemptions in the bill are drafted in a way that would make it very difficult for the minister to reject virtually any fossil fuel plant”*. In the officials’ report, as in my advice and this letter, the focus is on the key exemption clause 62G(1)(a).

The proposed amendment to clause 62G(1)(a) introduces the concept of a limit on start up time, and I welcome the inclusion of this as a new criterion for granting an exemption.

However, paragraph 16 of the officials’ report proposes to amend exemption (a) to refer to a plant that will have:

- *an average load factor below or less than a prescribed limit (if any); or*
- *greenhouse gas emissions below or less than a prescribed limit (if any); or*
- *any combination of average load factor and greenhouse gas emissions below or less than a prescribed combination of limits (if any); or*
- *any combination of start up time and average load factor and greenhouse gas emissions below or less than a prescribed combination of limits (if any).*

I have highlighted the words that are the source of my concern.

This exemption opens the gate very wide indeed. If the intention is to restrict the construction of significant new fossil fuel plants to open cycle gas peaking plants, then exemption (a) must prescribe three limits:

- A load factor limit; **and**
- A carbon dioxide limit – probably best expressed as an emissions intensity (kg CO<sub>2</sub> / MWh); **and**
- A start up time limit.

Therefore I recommend that exemption (a) be amended to read

*“The specified generation plant will be a non-base load plant that will have:*

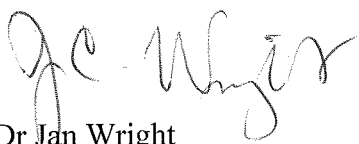
- *an average load factor less than a prescribed limit **and**;*
- *greenhouse gas emissions less than a prescribed limit **and**;*
- *a start-up time less than a prescribed limit.”*

With regard to the exemption 62G(1)(b)(ii) that relates to emergency and reserve, I am satisfied with the response of the officials. While what constitutes an emergency is to some extent in the eye of the beholder, I see no way that the legislation can be amended to deal with this problem.

With regard to exemption 62G(1)(e) I am satisfied with the response by the officials and the changes they have proposed.

Thank you for the opportunity to respond to the advice from officials.

Yours sincerely



Dr Jan Wright  
Parliamentary Commissioner for the Environment

Encl: *Emissions Trading Group report to the finance and expenditure committee on the Climate Change Bill.*  
Report no.42 dated 30 May 2008, received on 3 June 2008.

## EMISSIONS TRADING GROUP REPORT TO THE FINANCE AND EXPENDITURE COMMITTEE ON THE CLIMATE CHANGE BILL

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### Request

1. On 21 May 2008, the Finance and Expenditure Committee requested:

**Advisers (PCE/MED/PCO) to discuss and report back on PCE's recommendations for Part 2 of the Bill (Renewable Preference).**

### Response

2. This response provides officials' advice on the points raised by the Parliamentary Commissioner for the Environment ('PCE') on Part 2 of the Bill (Renewable Preference) in its report of 21 May 2008, following a meeting with PCE on 27 May 2008.
3. This response includes an additional recommendation to amend the Bill that is not included in the departmental report.
4. In its report, PCE advises that the renewable preference should not proceed in its current form. It notes:

*"A moratorium on baseload fossil fuel plants is an appealing concept, but the design in Part 2 would not be useful".*

5. PCE expresses concern with specific aspects of the effectiveness of the proposed policy. These concerns (presented in Appendix B of the PCE report) and changes to remedy them are discussed below.
6. Following these changes, PCE has indicated that they are more accepting of the Renewables Preference, noting that "while there are better approaches than a moratorium, these changes appear to give it more strength". PCE as indicated in their evidence to the Committee favours alternative instruments, for example the greater use of demand side management, as a means of achieving the 90% renewable energy target. Such instruments however, are addressed through other government policies and are outside the scope of this part of the Bill.

### Section 62G(1)(a)

7. PCE is concerned that an exemption under new section 62G(1)(a) of the Electricity Act for the operation of new non baseload fossil-fuelled plant is, in the absence of defining regulations, too open ended and has the potential to approve plant types that PCE believes would be inappropriate from an environmental perspective (eg, a high emissions coal plant).
8. The purpose of this exemption category is to allow for peaking plant to support intermittent renewable generation plant. Such plant is characterised by low capital cost, higher running costs, fast start capabilities (eg, from cold to full power in 10 to 15 minutes) and good ramp rate (ie, the ability to vary power output rapidly up and down).

9. Advisers (MED and PCO) have discussed this exemption and how regulations would be crafted to suit the Bill's purpose with PCE, who recommend that regulations should be made for the purposes of both limiting load factor and for limiting emissions. The Bill as introduced only allows for prescribing either a load factor or emissions level. MED advisers agree with PCE's recommendation to allow for the combination of these factors and therefore recommend a change to section 62G(1)(a) to allow for the combination of both load factor and emissions.
10. PCE is satisfied with this response, and note that an emissions intensity limit could be used to preclude inefficient high emitting plant (as suggested in its report).
11. PCE notes that the regulations could be gamed by building multiple small plants. While this concern is technically correct, the economics of running these plants are not sufficiently favourable. Therefore, it is highly unlikely that investors would construct multiple peaking plants that needed to compete to operate.
12. An additional issue discussed with PCE on 27 May is that the regulations as drafted could approve CCGT plant as non baseload which promised to operate under the load factor limit, with the later option for this plant to gain exemption to operate outside this restriction through an emergency, reserve energy provision, or after the expiry of the renewable preference restrictions.
13. MED advisers note that this outcome is also unlikely. The high capital cost of a CCGT plant makes it uneconomic to invest in this plant with a significant restriction on its operation. PCE notes however, that while this outcome may be unlikely, it is still possible.
14. To address this concern, MED advisers consider that the type of plant to be exempted under section 62G(1)(a) could be further controlled by adding a new criterion related to start time. Such a criterion could be used to limit section 62G(1)(a) exemptions to plant with the appropriate ramp rate and fast start capabilities that is needed to support intermittent renewable generation.
15. PCE advised it is satisfied with this proposed change to add a start-up criterion to prescribed regulations.
16. The revised recommendation is to proceed with section 62G(1)(a) but to amend it to the effect that it refers to a plant that will have-
  - an average load factor below or less than a prescribed limit (if any); or
  - greenhouse gas emissions below or less than a prescribed limit (if any); or
  - any combination of average load factor and greenhouse gas emissions below or less than a prescribed combination of limits (if any); or
  - any combination of start up time and average load factor and greenhouse gas emissions below or less than a prescribed combination of limits (if any).
17. The above formulations encompass the likely combinations that MED advisors believe would be used for regulations. They will provide more flexibility when designing the regulations in terms of ensuring that only genuine non-baseload plant will be able to qualify for an exemption under section 62G(1)(a).
18. A consequential amendment recommended by MED advisors is to allow for one or more combinations to be prescribed under section 62N (including prescribing when those combinations apply). This later step is necessary if it is required to prescribe a different set of regulations for different plant types, rather than a single set of regulations for all plant types.

***Section 62G(1)(b)(ii) Emergency/Reserve***

19. PCE expressed concern that the definition of emergency and reserve is difficult and unclear. MED advised PCE that reserve energy has specific meaning under the Electricity Act 1992, and that defining emergency further is difficult. However, in practice, the Electricity Commission will make an expert assessment as to whether the particular situation is an “emergency” in terms of the electricity supply system.
20. PCE advised it is satisfied with this explanation.

***Section 62G(1)(e) Swap exemption***

21. PCE expressed concern that this exemption was not defined clearly enough. In particular, it is not clear what a significant decline in emissions was or what magnitude of plant change or swap would reduce security of supply.
22. MED advised PCE that the departmental report includes recommendations to define “significant” as at least 20 per cent emissions reductions, and to link the reduction of security of supply into levels to be prescribed in regulations, so that the regulations can be referenced to the Electricity Commissions reserve energy policy.
23. MED advised PCE that it is difficult to make a more precise definition of security of supply in the Bill as the level or threshold in this policy is under the Electricity Commission’s operational control.
24. PCE advised it is satisfied with these proposed changes.