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#### **SUBMISSION ON MODEL USE OF SYSTEM AGREEMENTS – SCHEDULE 9**

- 1 Orion welcomes the opportunity to submit on the paper recently released by the Electricity Commission (the *Commission*) on the *model use of system agreements – schedule 9 discussion paper* (the *paper*).
- 2 Many of the Orion's comments in response the paper are also included in our response to the issues raised in the Commission's *load management value and pricing discussion paper*. We would like the Commission to consider Orion's submission on the *load management value and pricing discussion paper* as part of our response to this paper.
- 3 Our submission is in three parts:
  - 3.1 general comments on the paper;
  - 3.2 our response to the specific questions raised in the paper, which we set out in the schedule to this letter; and
  - 3.3 a proposed version of schedule 9 set out in appendix 1

## General Comments

### Difference between the retailer version and the distributor version of Schedule 9

- 4 The paper identifies that the differences between the retailer and distributor versions of the load management policy schedule relate to the rights of the distributor or the retailer to offer load control.
- 5 Orion considers that as a 'model' there is no reason not to have different model schedules that can provide some guidance to parties. Orion does not think that either of the current versions of schedule 9 is appropriate for inclusion in a final contract. Nor do we consider that the current proposal is appropriate.
- 6 Electricity distributors are load aggregators; they create economies of scale by gathering the demands of thousands of consumers and delivering this to the transmission system and wholesale market. There are substantial economic and social benefits that are derived from this activity which primarily accrue to consumers and society in general.
- 7 Importantly, it should be noted that distributors do not gain commercially from the existence of load management – consumers do. Distributors remain focused on delivering good value for money and reducing the need for capital expenditure on networks (including transmission) by controlling peak demands. This activity lowers the future asset value of distributors and Transpower, thus reducing their prices.

### ECWP's findings regarding property rights

- 8 The paper reiterates the ECWP's findings regarding property rights
  - a. *A consumer's property right to a supply of electricity arises from entering into a Contract with an electricity supplier;*
  - b. *Other than as provided for in the Contract or otherwise agreed with the consumer, no party has a right to interrupt the consumer's supply except where interruption or partial interruption of supply is needed for the maintenance of security of supply; and*
  - c. *The model use of system agreement must reflect the position specified in a, and b, above. The benefits of further load management however, are a matter of negotiation between parties.*
- 9 Distributors basically operate under either an interposed or conveyance agreement for the provision of line function services. These agreements are primarily between distributors and retailers and not directly with consumers and, in this respect, the ECWP's findings regarding property rights are inappropriate.

- 10 Distributor's conditions for allowing connection to their networks are set out via these contracts and other arrangements with retailers and also in associated networks codes. These can and do provide that distributors have rights to interrupt supply, either in part or completely. We can disconnect on giving notice to (for example) make a connection to our network for a new consumer (not part of maintenance of security of supply). In fact, distributors cannot and do not guarantee continuous supply. There is no property right for supply of electricity for consumers connected post 1993 and from 2013 this will apply to all consumers unless there is a change to the Electricity Act.
- 11 In Orion's case, as in some other cases, there is now a mandatory requirement as part of Orion's network code that consumers make available certain types of load that can be controlled by the distributor during emergency situations. This is a contractual matter that the consumer agrees to in forming their contract for supply.
- 12 In summary, we do have the right to interrupt the consumers supply.

**Distributors obliged to operate load control to obtain the highest value**

- 13 The paper suggests that where the ownership of transmitters and relays is split and retailers have entered into contracts with consumers for load control for energy supply-related purposes, distributors should have an obligation to operate load control to obtain the highest value for consumers.
- 14 Orion considers that this is a totally impractical obligation to expect distributors to manage. There are multiple issues with this proposal:
- 14.1 at any particular point in time it is unlikely that the distributor will know what is the highest value to the consumer. Also this is not an issue that can be considered on a half hour by half hour trading period e.g. the distributor may have deliberately restored load following a morning peak to allow hot water cylinders to recharge prior to the evening peak. During this period it may be argued that in a particular half hour the energy cost is the highest value. However, if the distributor responds to this half hour energy cost and sheds load, they may lose the ability to control load during the evening peak, which may have a considerably higher value to the consumer and to system stability in general than the earlier energy price;
- 14.2 there may be conflicts when a retailer/generator wants load reduced to avoid high energy costs yet another may want loads restored to maximise their revenue;
- 14.3 there is a need to maintain the hot water service levels to the consumer.
- 15 The paper provides no analysis to suggest that the load is not being assigned to its highest value to consumers now. The Government in its New Zealand Energy

strategy has identified security of supply as a key issue for the New Zealand economy; Orion agrees. The load management systems that distributors have installed in the past are assisting the good levels of security of supply that we experience today.

- 16 Many of the transmission upgrades that are currently being carried out, to enhance security of supply, are relying on the ability of distributors to manage the load on their networks to specified limits. The ability of distributors to continue to supply this essential service relies on the distributor's continued access to appropriate controllable loads.
- 17 Orion believes that distributors should co-ordinate and prioritise load management. We consider that there are real risks from fragmenting the control of load management to numerous other parties. These risks include:
- reduced security of supply
  - increased infrastructure investment required
  - more frequent interruptions to supply
  - increased costs to consumers and the New Zealand economy as a whole
- 18 Overall we consider that the proposal to '*place an obligation on distributors to operate load control to obtain the highest value for consumers*' is impractical.
- 19 Orion considers that use of the ripple system must be solely at the discretion of the distributor. For the ripple system to remain viable and continue to provide benefits to consumers, its use must be carefully managed. There can be only one coordinator and we consider that it is only the distributor that is in a position to take account of the many technical considerations that impact on the appropriate use of the ripple system. The distributor must have the discretion as to when the ripple system is used.

### **Split ownership of relays and transmitters**

- 20 We consider that the ownership of the relay is irrelevant (Paragraph 14 and the new wording at the end of Clause 2 of the proposed Schedule 9). If ABC Relay Rentals own the relay, ABC does not own the rights to control of the consumer's hot water cylinder. They're paid a rental (ultimately by the consumer) for the service to comply with the tariff and/or network code.

### **Priorities**

- 21 Paragraph 16 of the paper suggests that the priorities for the use of load management are network security purposes, transmission pricing signals and then purposes determined by the consumer. We consider that this is incorrect. The paragraph, as it

reads, ignores distribution peak shaving and the significant benefits available to consumers because of this.

- 22 We consider that in approximate order of importance to New Zealand, the uses of existing hot water load management are:
- Security of network supply (transmission and distribution).
  - Managing costs of distribution and transmission capacity for consumers.
  - Other (including reserves market, energy price).
- 23 An important consideration is that while short term gains may be possible by looking at the maximum value use of load management in a half hour, this is of secondary importance to the long term value the original investment in ripple equipment was made for. The value that is achieved year after year through maintaining security of supply and managing the costs of distribution and transmission capacity are, in our opinion, the prime use for load management.

## **Comments on the proposed Schedule 9**

### **Clause 2 Entirely Voluntary**

- 24 The first sentences are factually incorrect. The distributor makes services available under contractual arrangements. The decision on whether all or any part of the consumer's load is available for load management is a contractual issue and is not entirely at the discretion of the consumer. In some cases, as in Orion's, there is now a mandatory requirement as part of Orion's network code that consumers make available certain types of load that can be controlled by the distributor during emergency situations. This is a contractual matter that consumers agree to in forming their contract for supply.
- 25 This clause refers to "controlled load tariff options" and is biased towards an ICP based tariff structure. As the Commission is aware, a number of line companies use price signals at the GXP level. Orion considers that the drafting should be general enough that it does not limit the opportunity for innovation in distribution price signalling and if retained needs to be redrafted to encompass the broader distribution pricing mechanisms available.
- 26 Orion is strongly opposed to the proposed new wording at the end of this Clause 2. The installation of metering and load control equipment by the retailer does not, in our opinion, indicate or provide that the retailer has purchased the right to control load for electricity supply related purposes. There is no basis in fact for such an assertion.

#### **Clause 4 Uses for load management**

- 27 Please refer to our comments in the body of our submission. In summary we consider that the proposal to *'place an obligation on distributors' to operate load control to obtain the highest value for consumers'* is impractical.
- 28 We also consider that use of the ripple system must be solely at the discretion of the distributor. For the ripple system to remain viable and continue to provide benefits to consumers, its use must be carefully managed. There can be only one coordinator and we consider that it is only the distributor that is in a position to take account of the many technical considerations that impact on the appropriate use of the ripple system. The distributor must have the discretion as to when the ripple system is used.

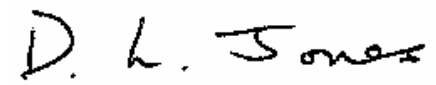
#### **Clause 9 Cooperation**

- 29 Orion does not agree with the proposed new wording in clause 9. The distributor cannot provide exclusive use of a particular channel to a single retailer insofar as any retailer with a relay capable of responding to a signal will be able to. Also any use of a specific retailer channel can only be based on a distributor's best endeavours to provide the response requested by the retailer. This response will be subject to the availability of time slots and the limitations of the distributor's ripple injection system including duty cycle. Signals required for the load management service provided by the distributor will have priority.
- 30 We also question whether this clause is effective in the longer term. How will this apply to a third party load control system operator using, say, SMS or some other communication medium?

#### **Concluding remarks**

- 31 Overall Orion considers that this schedule is just a model and as such there can be multiple different versions as we presently have. We consider that the original versions were not particularly appropriate, and that the proposed modifications have made this situation worse.
- 32 We consider that use of the ripple system must be solely at the discretion of the distributor. For the ripple system to remain viable and continue to provide benefits to consumers its use must be carefully managed. There can be only one coordinator and we consider that it is only the distributor that is in a position to take account of the many technical considerations that impact on the appropriate use of the ripple system. The distributor must have the discretion as to when the ripple system is used.
- 33 Thank you for the opportunity to make this submission. If you have any questions, please contact Dennis Jones (Industry Developments Manager) DDI 03 363 9526, email [dennis.jones@oriongroup.co.nz](mailto:dennis.jones@oriongroup.co.nz).

Yours sincerely

A handwritten signature in black ink that reads "D. L. Jones". The letters are cursive and slightly slanted to the right.

Dennis Jones  
**Industry Developments Manager**

## Schedule 1 – Answers to the Commission’s specific questions

Question	Response
<p>Q1: Do you agree that the priorities for the use of load management systems are network security purposes, transmission pricing signals and then purposes determined by the consumer? If not, why not?</p>	<p>No. We consider that this is incorrect. The paragraph, as it reads, ignores distribution peak shaving and the significant benefits available to consumers because of this.</p> <p>We consider that in approximate order of importance to New Zealand, the uses of existing hot water load management are:</p> <ol style="list-style-type: none"> <li>1. Security of network supply (transmission and distribution).</li> <li>2. Managing costs of distribution and transmission capacity for consumers.</li> <li>3. Other (including reserves market, energy price).</li> </ol> <p>The priorities as suggested in the paper ignore distribution peak shaving and the significant benefits available to consumers derived from this activity.</p>
<p>Q2: Do you agree with the recommendation that retailers have a responsibility to pass on the distributors’ load management signals to consumers? If not, why not?</p>	<p>This should be a matter of contract, and distributors may have a requirement that retailers ensure that certain loads will be controllable in, say, an emergency situation. We would expect that retailers in a competitive situation would want to be able to set their own price offerings. These prices would be influenced on by all the retailers input costs and not just the distributors.</p>
<p>Q3: Do you agree with the amendments made to Schedule 9 as shown in Appendix One of this paper? If not, please outline any proposed changes.</p>	<p>No. Please see our earlier comments and our proposed Schedule 9 included as Appendix 1.</p>

## **APPENDIX 1      Proposed - Schedule 9**

### **1. Provision of Ripple Signalling**

- 1.1. Pursuant to clause 2, the Distributor shall provide ripple signals for its Load Management Service, as part of the Delivery Service. Pursuant to clause 4 the Distributor may also provide additional ripple signals for other purposes such as meter register switching and street lighting control.

### **2. Load Management Services**

- 2.1. "Load Management Service" means:

- 2.1.1. providing a signal for the purpose of reducing or interrupting Delivery to a part of a Connected Customer's Installation, including as an example, but without limitation, Delivery to a water heater, on a basis previously agreed between the Electricity Retailer and Distributor.

- 2.2. The Distributor shall continue to operate its current Load Management Service, until such time as a new basis is agreed with the Electricity Retailer and Other Electricity Retailers, including, without limitation, for the following purposes:

- 2.2.1. To reduce the Distribution Network load in the event of emergencies occurring on the Distribution Network or on Transpower's Grid;
- 2.2.2. To alleviate congestion on the Distribution Network and manage demand for electricity at Network Supply Points;
- 2.2.3. To seek to minimise the transmission charges from Transpower.

- 2.3. The Distributor may extend the use of its current Load Management Service or provide other Load Management Services to the Electricity Retailer, at the Distributor's discretion.

### **3. Reporting Unplanned Interruptions to the Load management service:**

- 3.1. The Distributor shall use reasonable endeavours to report interruptions of its Load management service to the Electricity Retailer to the following timetable. Such reporting shall be by a process which is agreed between the parties:

- 3.1.1. Within [ ] minutes of the Distributor being advised of the occurrence of an unplanned interruption, the Distributor shall advise the Electricity Retailer the time and date of the event and the location and/or the connections affected.
- 3.1.2. As soon as the Distributor has reliable information, the Distributor shall advise the Electricity Retailer when restoration of the load Management service is expected and the cause of the unplanned interruption.

#### **4. Provision of Additional Ripple Signals**

- 4.1. The Distributor will negotiate with the Electricity Retailer to provide additional ripple signals over and above those that are already established for the Load Management Service. The Distributor shall use its best endeavours to provide these as required by the Electricity Retailer, subject to the availability of time slots and the limitations of the Distributor's ripple injection plants. Signals required for the Load Management Service shall have priority and all additional signals provided for the Electricity Retailer shall be chargeable.

#### **5. Termination of Load Management Services**

- 5.1. The Distributor will give reasonable prior notice (Not less than [ ] years) of termination of the load management services.