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nova energy

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Submissions
Electricity Authority / Energy Competition Task Force

By email: taskforce@ea.govt.nz

Consultation paper – Improving pricing plan options for consumers: Time-varying retail pricing for electricity consumption and supply

Nova Energy (**Nova**) appreciates the opportunity to contribute to the Electricity Authority/ Energy Competition Task Force (**The Task Force**)'s above-mentioned consultation.

Nova supports the Authority's focus on addressing key demand-side management challenges, such as the need for more efficient hot water ripple control and the complexities of moving to time-varying pricing plans. However, we have some concerns about the potential for a decrease in pricing innovation, and consumer disengagement if proposed mandated pricing plans become overly complex or difficult to understand. Further, Nova's view is price differentials designed to encourage consumer behaviour change could be economically inefficient for many consumers.

Nova also notes significant operational challenges tied to the transition to half-hourly data reconciliation. This transition has the potential to require substantial system and process changes for both retailers and network companies, including revamped billing systems, enhanced reporting tools, and more frequent data exchanges. Given these complexities, a phased approach is essential, allowing for thorough testing and system adaptations. Nova recommends the Authority delays implementation until at least April 2026 to allow stakeholders sufficient time to prepare. This will ensure a smoother, more effective transition.

In addition, Nova urges the Authority and Task Force to carefully consider the full deployment of smart meters and the ongoing reliance on legacy meters. Achieving universal smart meter adoption presents technical, cost, and access challenges that should be addressed in a new regulatory framework.

Lastly, Nova fully recognises the Authority's objectives and appreciates the Task Force openness and consultative approach as this is important to avoid unintended consequences. With careful planning and industry collaboration, the industry can do better in finding a balance between advancing time-varying pricing and protecting consumers from undue complexity and costs.

Thank you for considering Nova's feedback.

Yours sincerely

[redacted]

Charles Teichert

General Manager Commercial and Strategy

Nova submission: Improving pricing plan options for consumers: Time-varying retail pricing for electricity consumption and supply

Questions	Comments
Q1. Do you agree the issues identified by the Authority are worthy of attention? If not, why not?	Yes. In Nova's view, one of the most significant controllable demand sources in our energy system is hot water ripple control, managed at the network level. Retailers have limited influence over this, typically only through network tariffs set by network companies. Following the 2020 reset of the Transmission Pricing Methodology (TPM) by the Electricity Authority (the Authority), incentives for network operators to manage hot water ripple control were removed, as were incentives for some distributed generators. While it is possible hot water control systems could evolve toward more distributed, consumer-centric technologies over time, current systems remain one of the most important sources of Demand-side Energy Resources (DER). The events of 9 August 2021 highlight both the significance of this issue and the ongoing flaws in our energy system post-TPM revision. The Ministry of Business, Innovation and Employment (MBIE) review of the event included recommendations regarding hot water ripple control which remain a work in progress.. Another layer to the current challenges is smart meter adoption not yet being universal, and there remains a subset of sites still using legacy meters. Several factors contribute to this, including cost, technical challenges, and, in some cases, limited customer access or total customer refusal to install a smart meter. Regulation and policy must continue to account for legacy residual profile costs, as the full deployment of Advanced Metering Infrastructure (AMI) is not always feasible in every scenario. Additionally, even with AMI meters in place, it is important to acknowledge that data availability is not guaranteed. Communication and meter-related issues may still arise needing estimates, which must be managed accordingly. Regarding the proposal to require mandatory reconciliation for market settlement purposes; this is likely to be more complex than initially anticipated, considering the following points: • Retailers may need to amend their retail billing and reconciliation systems to accommodate the proposed changes which is additional pressure and cost to retailers. • The flow of data and its potential impact on network pricing, including the relationships between uncontrolled and controlled meter channels/registers needs to be considered. • Amendments to the registry and/or the regulations on the registry (specifically concerning meter data and settlement flags), may be necessary. • New regulation may be necessary to address missing meter data (both permanent and temporary), and provisions should be made for situations where meters become non-communicating for extended periods, along with appropriate management practices for such cases.

	While AMI metering penetration is generally high, a number of AMI meters still rely on the 2G/3G telecommunications network (scheduled to be decommissioned at the end of 2025). These meters will become non-communicating (effectively making them legacy meters) unless upgraded to 4G or 5G communications before the end of 2025. While Nova anticipates resolving necessary communications upgrades with our third-party metering providers in the short-term, Nova notes that the limited competition among metering suppliers could lead to less favourable metering service and pricing outcomes moving forward given reducing competitive tension. Regarding the problem definition in Section 4, something that appears to be missing is the issue of adequacy and efficiency of economic incentives for retailers to encourage consumers to change their behaviour. Based on Nova's experience with time-varying pricing structures, it has observed the following: • Consumers highly value electricity on demand, meaning that making incentives to change the pattern of behaviour in a sustained fashion is more expensive than the costs of procuring supply during peak periods • The transaction costs associated with implementing behaviour change are disproportionately high compared to the benefits achieved. Evidence of the above is value of lost load being set at a minimum of $10,000/MWh, or consumer advocacy groups continuing to call for simpler retailer tariff structures, highlighting that not all consumers are able to take advantage of existing pricing plans (if available), amongst others. Generally, demand response strategies beyond offering free power during off-peak periods have focused on technology application. Historically, this has included the use of hot water ripple control, where hot water cylinders were used as energy storage, as well as alternative fuels like natural gas or other solid fuels for heating (including water heating). More recently, solar photovoltaic (PV) systems, battery storage, and EV's have entered the market however remain expensive and currently out of reach for most consumers.
Q2. Which option do you consider best addresses the issues and promotes the Authority's main objective? Are there other options we have not considered?	In Nova's view, two of the proposed options best address the issues and promote the Authority's current main objectives: *a) Requiring Retailers to Offer Time-Varying Price Plans* - Nova shares the Authority's recurring concerns that mandating time-varying price plans may lead to consumer disengagement or impose costs that are unmanageable to consumers. Other risks may include: • Price differentials necessary to incentivise customer behaviour change may be higher than what is economically rational. If tariffs must reflect true costs, this could result in low uptake or inefficacy in driving long-term behaviour change. • The added complexity of time-varying tariffs could cause consumer disengagement, complaints, and dissatisfaction, even if these plans are optional. • Mandating this type of pricing regime may lessen pricing innovation and therefore competition. *b) Ensuring Retailers Fully Account for the Costs of Peak Demand* - Regarding options to ensure retailers fully understand the costs of their contribution to peak demand, particularly through the use of AMI data for

	reconciliation. Nova recognises that implementing this could involve significant hidden complexities, as outlined in question 1. Nova recommends this issue be thoroughly examined in consultation with internal experts from retail and MEP entities to identify and address potential challenges (before a final decision is made). In addition, given that residual profiles will likely be required to retained as a matter of pragmatically having to deal with missing AMI data and customers preferences for legacy meters and ICP's where there are communication blackspots, implementation timeframes can be staged on a 'ready to go' basis as retailer update their systems and processes subject to requirements to implement changes within a practical timeframe. Retail audits would be an appropriate mechanism to monitor compliance.
Q3. Should we require retailers to offer a price plan with time-varying prices for both consumption and injection? Why and why not?	No. Refer to our responses to Q1 and 2 above.
Q4. Do you have any feedback on the design requirements?	As noted above, current experience suggests that price differentials between peak and off-peak periods appear to often be extreme and do not reflect actual costs, particularly during times of general scarcity. For example: • Electric Kiwi's "hour of free power" per day, provided the selected hour falls within an off-peak period. • Contact Energy's offer of free power from 9 PM to midnight on weeknights, or from 9 AM to 5 PM on weekends. The fact that these power periods are "free" implies that, in most cases, a cross-subsidy is likely being applied from other hours of the day to fund these free supply periods. While Nova understands that these plans have been effective in encouraging consumers to shift their consumption patterns, they also demonstrate the degree of incentive needed to drive consumer behaviour. Nova trialled differential pricing plans with a select group of a few thousand customers, in 2017 to 2019 with the aim of learning and expanding the offering. It was found that cost-reflective price differentials were insufficient, especially when network pricing differentials were low. Also, customers reverted to their normal consumption patterns after a relatively short period, indicating that consumers generally prefer simpler, less complex plans that do not require significant attention, effort or lifestyle changes. The proposed price plan design requirements also include a requirement to pay consumers for injection at rates that reflect the economic benefits. Given the volatility in power prices, determining how these rates would be calculated and enforced poses significant challenges. Furthermore, the requirement to pass network rebates through at the ICP level could introduce additional complexity and costs for retailers, potentially outweighing the benefits for consumers.
Q5. Is there a risk that injection rebates will not be passed through to the	As noted above.

consumers targeted? If so, how could we safeguard against this risk?	
Q6. Which retailers should be captured by the proposal and why?	The proposed thresholds seem reasonable, considering that significant uptake of time-varying plans could be likely to add competitive pressure on all retailers to incorporate them into their range of offerings.
Q7. What are your views on the proposed timeframe for implementation of 1 January 2026? Would 1 April 2026 be preferable, and if so, why?	A 1 April 2026 implementation date would be more appropriate and sensible, as it gives stakeholders more time after the December break to implement necessary changes to systems, processes, and procedures. This would ensure a fairer transition, especially considering the other changes occurring in 2025. The experience with implementing consumer care obligations demonstrates why a 1 January start would be problematic. An April date also aligns better with network pricing changes, which would be timely.
Q8. What are your views on Part 2 of our proposal that would require retailers to promote the time-varying price plans?	While a retailer may promote the availability of time-varying plans, determining whether a customer would benefit from selecting such a plan requires enough usage data to make an informed comparison and determine (or not) whether that is the case. This data is typically unavailable for customers who have recently switched providers. Therefore, any analysis of plan suitability should be postponed until there is sufficient usage history —usually after 8 to 12 months being with the retailer. Additionally, a change in a customer's personal circumstances may influence the customer's decision. This can include shifts in usage patterns due to new appliances, changes in household size, alterations in working hours, or other lifestyle factors. Lastly, as previously shared with the Authority, mandating this type of pricing regime may lessen pricing innovation in much same way as the Low Fixed Charge Regulations did. Nova believes that retailers (and therefore customers) should be able to develop pricing plans and offers consistent with their retail strategy. Mandating retail pricing structures upon the industry could hinder innovation, rather than help it.
Q9. What should the Authority consider when establishing the approach to and format of the reporting regime?	No comment at this stage.
Q10. Should the Authority include a sunset provision in the Code, or a review provision? Why?	No comment at this stage.

Q11. What are your overall views on Part 3 of the proposal?	In essence, while Nova acknowledges the need for time-varying pricing plans, it has some concerns about the complexity and costs involved in implementing these changes, the economic incentives for consumers, and the potential for consumer disengagement due to overly complex tariffs. The Authority should be careful when deciding on an implementation date (which Nova - and likely the majority of the sector - would be more beneficial if it was from 1 April 2026) and take careful consideration of the existing data challenges, and other current reporting requirements of stakeholders, to ensure a smooth transition.
Q12. What are your views on Part 4 of our proposal to amend the Code to require that consumers are assigned to time-varying distribution charges, that retailers provide half-hourly data to distributors for settlement, and that distributors must use this information?	Implementing half-hourly usage data for reconciliation and settlement introduces significant complexities that may not be apparent to those not directly involved in these processes. Some of these challenges are: • Transitioning to half-hourly data involves significant changes to both registry and retailer systems to handle the increased volume of data, including storage, processing, and management. • Moving from daily or monthly reconciliation cycles to half-hourly cycles increases the frequency of data exchanges and adjustments, requiring more frequent updates. • Accurately allocating energy consumption and generation based on half-hourly data requires advanced algorithms to account for factors like loss adjustments and network constraints. • Generating detailed reports from half-hourly data will require enhanced reporting tools and compliance mechanisms to ensure accuracy and consistency. • Billing systems must be revamped to accurately reflect half-hourly consumption, ensuring alignment with the new settlement processes. [1] These challenges highlight the need for thorough planning, adequate resource allocation, and strong collaboration among industry stakeholders to facilitate a smooth transition to half-hourly data for reconciliation and settlement.
Q13. Do you agree with the objective of the proposed amendment? If not, why not?	Overall, yes, considering the challenges and comments made in this submission.
Q14. Do you agree the benefits of the proposed amendment outweigh its costs?	While many of the benefits are undisputed, Nova is unable to comment, as it is difficult to assess whether the benefits outweigh the costs based on a qualitative evaluation.
Q15. Do you agree the proposed amendment is preferable to the other options? If you disagree, please explain your preferred	

[1] Nova's billing system does allow to manage and provide to distributors half-hourly electricity usage data.

option in terms consistent with the Authority's statutory objectives in section 15 of the Electricity Industry Act 2010.	
Q16. Do you have any comments on the drafting of the proposed amendment?	