



COMMERCE COMMISSION

Regulation of Electricity Lines Businesses
Decision on 2009/10 Non-Part F Capital Expenditure Threshold for
Transpower
(20 August 2009)

Purpose

1. The purpose of this paper is to set out the Commerce Commission's decision that the threshold amount for Transpower's non-Part F capital expenditure for the 2009/10 year will be set at \$189.6 million.
2. On 29 July 2009, the Commission invited submissions on its preliminary view that Transpower's non-Part F capital expenditure (non-Part F capex) threshold for the 2009/10 year should be set either at \$189.6 million, or at \$185.6 million if the Bunnythorpe-Wanganui B line replacement (BPE-WGN B line replacement) project was found to not comply with the non-Part F capex process as set out in the administrative settlement between Transpower and the Commission.
3. The Commission received two submissions from interested parties, Transpower and Major Electricity Users' Group (MEUG).
4. Having considered these submissions, the decision to set Transpower's non-Part F capex threshold for 2009/10 at \$189.6 million will be implemented by notice in the New Zealand Gazette.

Background

5. The Commission is required to set a non-Part F capex threshold for 2009/10 for Transpower under the terms of the administrative settlement between the parties, entered into under the Commerce Act 1986 (the Act).
6. The threshold provides a pre-approved level of capital expenditure for the forthcoming year that Transpower may, upon expenditure and commissioning, enter into its regulatory asset base (non-Part F capex threshold).
7. The term 'non-Part F capex' is not intended to suggest that this category of investments cannot be submitted to the Electricity Commission. Rather, these are investments that are not presented, at least initially, to the Electricity Commission for approval because the Electricity Commission does not currently have an established process for reviewing such capital expenditure.
8. The types of expenditure that Transpower submits to the Commission for approval under the settlement include:
 - a) replacement and refurbishment of existing transmission assets;

- b) minor development and enhancements of transmission assets¹; and
 - c) operation network information and technology services.
9. As part of its consultation on the administrative settlement, the Commission invited interested parties to submit on the process undertaken to review Transpower's proposed level of capital expenditure for the 2007/08 financial year. In March 2007, Strata Energy Consulting Limited (Strata) completed a review of Transpower's policies, processes and practices with respect to capital expenditure on asset replacement, refurbishment and enhancement, and IT. Strata considered the appropriateness and effectiveness of those policies and processes in achieving the least-cost objective set out in the October 2006 GPS on electricity governance and in Transpower policy documents.² Strata did not undertake a full technical review of individual projects.
10. The Commission considered Strata's report, Transpower's comments, and all submissions on that report. The Commission also took into account Strata's final recommendations in regard to the non-Part F capex threshold, post submissions. The Commission set the non-Part F capex threshold in 2007/08 at \$120.7 million. The following year, the Commission set Transpower's 2008/09 threshold at \$202.8 million. These threshold values set by the Commission were below the levels proposed by Transpower as they incorporated efficiency gains that the Commission considered achievable by Transpower.
11. The Commission's decision, as set out in this paper, is in relation to Transpower's 2009/10 non-Part F capex threshold. Transpower initially proposed a threshold of \$209.6 million. However, having considered the Strata Report for 2009/10 and submissions on its consultation paper of 29 July 2009, the Commission has applied downward adjustments to this, and will set the threshold at \$189.6 million.

Non-Part F Capex Threshold Process

12. The administrative settlement specifies that the non-Part F capex threshold for each financial year of the settlement period, including 2009/10, is to be set as follows:
- a) Transpower will record any material changes to its asset management, business planning and capital works policies or processes relating to non-Part F capex that have occurred during the calendar year before the commencement of the assessment period. These records are to be provided to the Commission in January immediately preceding the commencement of the assessment period;
 - b) during that January Transpower will make available to the Commission a schedule that shows, for non-Part F capex projects completed in the second half of the calendar year before the commencement of the assessment period, a comparison of actual expenditure in that second half versus budgeted expenditure for that second half. Reasons for variations will be provided for all projects that have exceeded 10% of budgeted cost;
 - c) Transpower will make available to the Commission upon request a schedule which sets out significant movements of non-Part F capex projects into and out of the capital works plan which have occurred during the second half of the calendar year before the commencement of the assessment period as well as a forecast of similar movements for the first half of the following calendar year;

¹ Practical financial limits are applied so that only individual asset development and enhancement projects below \$1.5 million, and enhancement programmes of work up to \$5.0 million are submitted for approval to the Commission under the non-Part F approval process.

² Strata Energy Consulting Limited, *Review of Transpower's Capital Expenditure Plans*, May 2007, p 11.

- d) Transpower will prepare its non-Part F capex plan and business plan forecasts for the assessment period in accordance with capital works and business planning processes and policies in the January/February immediately preceding the commencement of the assessment period³;
- e) Transpower will ensure contingency sums are adjusted to no more than 7.5% for IT and 0% for replacement, refurbishment, minor development and enhancement expenditure;
- f) Transpower will make available upon request project approval documentation, including a final schedule of all projects making up the proposed non-Part F capex, for the assessment period, together with the project approval status, in final, non-draft form (non-Part F capex plan);
- g) the Commission (at its discretion) will review (or engage an independent third party to review) the non-Part F capex plan beginning in February immediately before the commencement of the assessment period in order, among other things, to provide assurance that:
 - the levels of contingency included in the project budgets have been established in accordance with paragraph (e) above;
 - the expenditure forecasts have been prepared in accordance with Transpower’s capital works and IT planning processes and policies;
 - Transpower’s processes have considered and targeted appropriate least-cost, efficient, interventions;
 - Transpower has proactively pursued and implemented process improvements and delivered on commitments made to review the scope for improvement to its non-Part F capex processes relating to procurement audit, review of open book tendering for replacement and refurbishment , and project approval document templates;
- h) if, following consultation, the Commission finds that Transpower has complied with and provided for the requirements of paragraphs (a) to (g) then the resulting capital expenditure will be deemed appropriate for the transmission (non-Part F capex) threshold; and
- i) the Commission will provide Transpower with a draft copy of the Commission’s (or their agent’s) findings and any recommendations from the above review, for identification of any factual errors;
- j) the Commission will then determine the amount of the total non-Part F capex for the transmission (non-Part F capex) threshold for the assessment period, and will amend the relevant *Gazette* notice to state that amount.

13. The manner in which the threshold has been designed, and the process to set each annual threshold, is intended to provide Transpower a level of discretion and allow it to exercise its role as a ‘prudent’ and dynamic grid planner. The threshold provides an overall pre-approved level of expenditure that Transpower should not exceed in calculating its year end revenue requirement. However, Transpower retains the discretion to prioritise, defer, bring forward, add or remove projects so long as the total capital expenditure does not exceed the threshold. Transpower may overspend this threshold, but any overspend is subject to an ex-post review prior to being allowed into the RAB for the purpose of calculating its revenue requirement.

³ The capital expenditure forecasts (and Business Plan) prepared in January / February of each financial year, which will set out the forecast non-Part F capex threshold expenditure for the subsequent financial year, were to have been approved by the Transpower Board during the month of April.

Interim threshold set

14. The administrative settlement anticipates that the Commission will set a non-Part F capex threshold for 2009/10 by 1 July 2009. Delays occurred during the review and the Commission was unable to make a final determination by that date. Delays occurred due to various reasons, such as the need to understand the reasons for and implications of:
 - Transpower's significant under-spend against its 2008/09 threshold;
 - the low level of project approvals that had occurred (only 29% for IST capex, and 54% (by value) of replacement and refurbishment projects);
 - an increasing number of rolled over projects; and
 - the classification of one of the proposed projects, the BPE-WGN B line replacement in the Taranaki region.
15. Combined, these matters raised concerns about the accuracy and reasonableness of Transpower's proposed level of non-Part F capex for 2009/10.
16. Given delays in completing the 2009/10 non-Part F capex review, the Commission published an interim threshold of \$189 million in the Gazette on 25 June 2009, to ensure a threshold was in place at the expiry of the 2008/09 threshold. This interim threshold took effect on 1 July.

Review of Transpower's proposed 2009/10 threshold

17. The Commission engaged Strata to review Transpower's proposed threshold of \$209.6 million as per the process set out in the settlement. Strata advised the Commission on whether or not Transpower had developed its proposed capex forecast in accordance with the process and requirements as set out in the settlement agreement.
18. One of Strata's key findings is that Transpower's proposed threshold does not fully comply with the obligations and processes set under the settlement.⁴ The settlement requires that Transpower 'has proactively pursued and implemented process improvements' targeting least-cost objectives. Although some process improvements have been made by Transpower to strengthen project planning and to target 'least cost' objectives, Strata advised the Commission that Transpower's process improvements have yet to yield significant cost reductions. Strata also noted that the process improvements are not complete, particularly in respect of replacement and refurbishment expenditure.
19. In previous reviews, Strata identified that further efficiency gains could be made if Transpower adopted capex reduction targets, undertook a cost analysis of the impact of changes to policies, made changes to cost estimation processes and procurement policies, and reviewed condition assessment policies. Although Strata acknowledges that Transpower has made some improvements to its policies, procedures and processes, Strata considers that further efficiency gains are available and are not reflected in the Transpower business plan. Strata recommends a 2.5% downward adjustment be applied to all projects to reflect efficiency gains achievable from process improvements.
20. A second key finding from Strata's review is in regard to the proportion of projects that have been through Transpower's internal validation and approval processes. These processes are applied by Transpower to ensure that least cost objectives are being met, and that only essential projects are being undertaken. Strata's review of Transpower's capital works indicates that gains of at least 5% can be made when the project validation and approval process is undertaken. However, at the time Transpower proposed its

⁴ The Commission will address separately Transpower's non compliance with its settlement obligations to the process of setting the 2009/10 threshold.

threshold of \$209.6 million, only 29% of projects had been fully reviewed and approved for information services & technology capex, and 54% of (by value) of replacement and refurbishment projects.

21. Strata recommends that the Commission apply a somewhat conservative 2.5% downward adjustment to those projects that have not completed the validation and approval process. This is to reflect the minimum cost reductions that are likely to be achievable had Transpower's internal validation and approval processes been completed.
22. A third key finding from Strata's review is in regard to the projects being rolled from one year into the subsequent year's threshold. The review of the 2008/09 and 2009/10 regulatory periods shows that the value of projects being rolled from one year into the next is no longer approximately matched by the value of unplanned projects that are undertaken. The impact of this is to inflate the threshold to a value higher than that actually required by the value of the projects that, for various reasons, are not undertaken.
23. In response to this, Strata recommends that the Commission reduce the threshold by 6% during the 2009/10 regulatory period to approximately balance the projects rolling in and rolling out of Transpower's business plans. The adjustment factor of 6% constitutes the approximate value of projects Strata expects Transpower will not undertake.
24. In sum, Strata recommends to the Commission that Transpower's proposed non-Part F capex threshold should be adjusted downwards to reflect three factors. These (discussed above) include:
 - a 2.5% downward adjustment applied to all projects to reflect efficiency gains achievable from process improvements;
 - a 2.5% downward adjustment applied to projects that have not been through Transpower's approval process, reflecting a minimum level of cost reductions that are likely to be achievable from Transpower's internal validation and approval processes; and
 - a 6% downward adjustment to account for the rolled over projects which are not expected to be undertaken by Transpower during the 2009/10 regulatory period.
25. The combined impact of these three adjustments reduces Transpower's proposed threshold of \$209.6 million down to \$189.6 million, a reduction of 9.5% or \$20 million (\$7.9 million to reflect efficiency savings being readily achievable and \$12.1 million to account for the rolled over projects unlikely to be undertaken in the forthcoming year).

Commission's preliminary decision

26. On 29 July 2009, the Commission consulted on its preliminary decision that Transpower's proposed 2009/10 non-Part F capex threshold be adjusted to \$189.6 million (or \$185.6 million if the BPE-WGN B project was reclassified and excluded from the non-Part F review).
27. In light of Strata's professional judgement regarding potential efficiency improvements available across the range of Transpower's investments, the Commission's preliminary view was that the 2.5% reduction recommended by Strata to be applied to all projects was a conservative downward adjustment.
28. The Commission also considered that, given Strata's advice that projects going through Transpower's complete validation and approval process showed, on average, efficiency gains of at least 5%, a 2.5% downward adjustment on those projects that had not been through this process was also reasonable and conservative. Transpower's level of forward planning of projects had been below that which was desirable, particularly in

relation to the low proportion of projects subject to Transpower's own validation processes.

29. The Commission shared Strata's concern, that certain projects were unlikely to be undertaken in the 2009/10 year, and that a 6% adjustment for rollovers was appropriate. The reason for this adjustment was that the threshold was intended to provide Transpower the appropriate level of capital expenditure to maintain the integrity of the grid in the forthcoming year. Transpower had, however, failed to justify the inclusion of projects year after year, which were not undertaken.
30. The Commission accepted that efficiency improvements could be achieved in a variety of ways, and considered that Strata's proposed top down approach was straightforward and pragmatic. The Commission was of the view that these recommendations were fair, reasonable and achievable.
31. The Commission also noted that Transpower had under-spent against all of its three previous capex thresholds. In the 2008/09 year, the under-spend was significant. It was noted that Transpower's under-spend, every year, was despite the Commission applying various efficiency factors and downward adjustments to the threshold level proposed by Transpower.
32. Finally, the Commission highlighted that the non-Part F capex threshold value did not in any way constrain Transpower from undertaking capital expenditure. The settlement provided a second approval mechanism - an *ex post* review by which Transpower could seek regulatory approval, after the event, for prudent investments. Another option is that Transpower can simply submit any additional expenditure to the Electricity Commission for review, and if approved, Transpower would recover its costs.

Submissions

33. On 12 August 2009, the Commission received two submissions from interested parties, Transpower and MEUG.
34. Overall, Transpower finds that Strata's key findings represent a fair assessment of the company's performance. Transpower acknowledges that the company's capital planning and delivery processes need further improvements and that a 9.5% adjustment to its planned budget is appropriate.
35. MEUG's submission expresses the view that the Commission's conservative or lenient approach to Transpower over the past two years has delivered only modest improvements in its budgeting, approval and implementation processes. The Commission agrees with MEUG that the improvements have been slow. In response, the Commission considers that the downward adjustment to Transpower's proposed 2009/10 non-Part F capex of \$20 million, compared to the \$7.7 million in 2008/09, conveys the Commission's view that Transpower needs to significantly improve its planning forecasting, and implementation processes.
36. The Commission does not share MEUG's view that its approach provides Transpower with a generous return. The identified inefficiencies in Transpower's project planning and implementation are addressed by the Commission by applying adjustment factors of 2.5% to all projects and another 2.5% to projects that have not been through Transpower's approval process. The Commission recognises that this assessment is subjective, but a \$7.9 million reduction to the threshold is appropriate and reflects achievable efficiency savings.

37. MEUG also suggested that the Commission should adopt an approach that sets the threshold to 'likely outcomes'. Such an approach would provide Transpower with a strong signal that it needs to accelerate the pace of its improvements.
38. In response to MEUG's concerns, the Commission is of the view that the approved level of expenditure, in this instance, is best to be based upon what investments should be undertaken, rather than Transpower's historical capabilities. This will allow Transpower to build its internal and external capabilities and resources. The Commission also notes that under-spend from the previous years has created a backlog of required investments.
39. Hand in hand with this approach is the limitation that Transpower may only recover the lesser of actual expenditure, or the approved cap. The Commission is, therefore, of the view that the approved 2009/10 non-Part F capex threshold (\$189.6m) represents the right level of capital expenditure intended to maintain the integrity of the grid.
40. In addition, in light of Transpower's repeated breaches of its quality threshold since 2006, the Commission is of the view that this approach provides the right incentives to invest in the grid whilst putting pressure on its costs through the use of adjustment factors.

Bunnythorpe-Wanganui B line replacement

41. At the time when its preliminary view was released, the Commission was still seeking information from Transpower regarding the BPE-WGN B line replacement project. This project had been included by Transpower in its proposed 2009/10 non-Part F capex threshold as a 'like-for-like' replacement project.
42. Transpower estimated the BPE-WGN B line replacement project value to be approximately \$14 million, with \$4 million being included in the 2009/10 threshold (the remaining amount is likely to be included in the following year's threshold).
43. The Commission was concerned that the project might not have been appropriately classified as a like for like replacement and thus potentially requiring it to be excluded from the non-Part F capex threshold.
44. On 30 July 2009, Transpower provided the Commission with its economic analysis which demonstrated that, compared to alternatives, the like for like replacement option showed a small net benefit. Transpower also demonstrated that the replacement of the line with double circuits, compared to the alternative option of a single circuit, would provide additional benefits such as greater flexibility and future proofing for potential new wind generation in the Taranaki area.
45. The Commission's decision is that the initial \$4 million expenditure for the BPE-WGN B line replacement project be included in the 2009/10 non-Part F capex threshold, bringing the total capex amount to \$189.6 million.

Final Decision

46. The Commission's review has followed the process set out in the settlement. The Commission has considered Strata's advice and noted the comments made by Transpower and MEUG in their submissions. The Commission has decided that Transpower's non-Part F capex threshold will be set at \$189.6 million for the 2009/10 financial year. The Commission's decision is based on a downward adjustment from \$209.6 million. The Commission agrees with Strata's advice that:
 - efficiency savings in the order of at least \$7.9 million are readily achievable while still achieving the same output in terms of capital works completed, and

approximately \$12.1 million of projects included in Transpower's threshold are unlikely to be undertaken in the forthcoming year.