

I have been asked by Clayton Utz to review the economic and regulatory principles applicable to the NEMMCO decision of 6 December 2001 that the SNI interconnection transmission facilities proposed by TransGrid were “justified” under the regulatory test promulgated under the National Electricity Code (the Code), and the application of Murraylink of December 21 2001 to NEMMCO for review of that decision. Murraylink contends NEMMCO should have disapproved that application because its net benefits would be smaller than those of an unbundled SNI, which would exclude the interconnection link between New South Wales and South Australia.

I have been provided with the following material (which, however, I have by no means studied exhaustively):

NEMMCO, An Introduction to Australia’s National Electricity Market

NEMMCO, Determination, Clause 5.6.6 of the National Electricity Code, SNI Option, 6 December 2001

IRPC, SNI Stage 1 Report, October 26, 2001

IRPC, SNI Stage 2 Report, October 26, 2001

Australian Competition and Consumer Commission (ACCC) Final Determination, Applications for authorization, National Electricity Code, 22 December 1999

ACCC, Regulatory Test for New Interconnectors and Network Augmentations, 15 December 1999

In the National Electricity Tribunal, In the matter of an Application for Review of a NEMMCO determination on the SNI interconnector dated 6 December 2001, Murraylink Transmission

Company Pty Ltd, Applicant, National Electricity Market Management Company Limited, Respondent, filed 21 December 2001.

Witness statement of Anthony Steven Cook, filed 14 May 2002.

Witness statement of Henry Isaac Ergas, filed 15 May 2002.

Witness statement of Gregory John Houston, filed 28 June 2002.

Witness statement of Stephen Peter King, filed 15 May 2002.

Witness statement of Stephen Charles Littlechild, filed 23 May 2002.

Witness statement of Michael Timothy Thomas, filed 15 May 2002.

As I understand it, the prescribed regulatory test is whether the proposed project is demonstrated by a cost/benefit analysis to offer the greatest present value of net benefits from among the practicable alternatives. In making this hypothetical comparison, the Inter-Regional Planning Committee (IRPC) asked TransGrid if it would be prepared to propose “the alternative comprising [only] the unbundled components of the SNI Option” favored by Murraylink. TransGrid responded that it would not, because of the commercial and regulatory risks to which that project would expose it. In consequence, NEMMCO concluded that the Unbundled SNI proposal was not a practicable alternative¹ and approved

¹ “In respect of commercial feasibility, there would appear to be a risk of stranding assets installed as part of the ‘Unbundled’ SNI proposal. This is on the basis that Murraylink is an entrepreneurial interconnection and may be bid into the market in a way that results in a lower utilisation of upstream transmission assets. This may provide a basis for stranding those transmission assets and would cast doubt on the commercial feasibility of an ‘Unbundled’ SNI proposal...” (pp. 13-14); “On the basis that the ‘Unbundled’ SNI proposal may not be commercially feasible, and the fact that the only practical proponent is TransGrid which has previously indicated that it would not be prepared to undertake the proposal, NEMMCO has no grounds to depart from the approach of the IRPC, namely that the ‘Unbundled’ SNI proposal, either alone or in conjunction with the SNOVIC 400 Option, is not practicable and cannot therefore be considered as an alternative project or credible market development scenario under the Regulatory Test.” (p. 14) (“Report – Clause 5.6.6 of the National Electricity Code – SNI Option”)

the entire SNI proposal, incorporating inter-regional facilities directly competitive with Murraylink. Murraylink appealed that decision, contending that SNI did not pass the test because unbundled SNI was a higher-valued alternative.

I will organize my appraisal of this issue as follows:

- *the rationale of the regulatory test;*
- *the criterion of commercial feasibility;*
- *the criterion to be applied in selecting alternative projects for approval including the dilemma posed if the option with greater net benefits is assertedly commercially impracticable:*
alternative resolutions of the dilemma;
- *the goal of competitive neutrality.*

The rationale of the regulatory test

The regulatory test that NEMMCO is instructed to apply to any proposed transmission project—maximization of the net economic benefits among available alternatives—is of course unexceptionable in economic terms: it achieves the central goal of “economizing” or economic efficiency, extracting the maximum benefit from society’s limited resources. Whether or not confronted with competing proposals—as in the present instance—NEMMCO, properly, compares the likely net benefits of any proposed project with those of other possible projects, selected, necessarily, on the basis of the extent to which they are (1) substitutable for one another and (2) commercially and technically feasible. In so doing it also ensures the socially most efficient distribution of the supply function between regulated and unregulated sectors, taking into account their differing motivations and likely behavior.

The criterion of commercial feasibility

I observe that witness Stephen King quarrels with NEMMCO's assertion of the need to consider the commercial feasibility of the several proposals and the related question of "whether there is a proponent or likely to be a proponent for the proposal," on the following grounds, among others:

1. "NEMMCO has provided no evidence to substantiate its claim that the potential for stranding 'would cast doubt on the commercial feasibility of an "unbundled" SNI proposal.'"²

Whether or not NEMMCO has indeed "provided no evidence" I must leave to others, but I find persuasive Mr. Houston's explication of the "commercial risks" to which TransGrid said the unbundled project would expose it, and of why NEMMCO, recognizing those risks, properly concluded that the unbundled SNI proposal was not a practical alternative in the present circumstances.³

2. "An efficiently operated single transmission network may require augmentations that, if considered in isolation, would not be commercially feasible."⁴

This statement is inherently nonsensical: how can the profitability of "augmentations" be "considered in isolation" from what those "augmentations" do to the profitability of the entire venture? Moreover, it fails to confront, let alone contradict, the specific reasoning on the basis of which TransGrid concluded that the unbundled SNI augmentation would, in its specific circumstances, be irrational—considered not

² p. 21, Section 6, Stephen King's Statement.

³ pp. 32 -33, section 3.3.2.5, Statement of Gregory John Houston dated 28 June 2002.

⁴ p. 21, Section 6, Stephen King's Statement.

“in isolation” but in its entire regulatory and commercial context, as I will myself further explicate presently.

Moreover, Professor King seems to assert that the “commercial feasibility” test is superfluous, because if a project were commercially feasible “in its own right” it would presumably be undertaken with “no need for it to be included in a regulated transmission network. In this sense [he goes on to say], commercial feasibility seems to be the exact wrong criterion for NEMMCO to use.”⁵ It is not clear to me—nor does he make it clear—how his observation relates to the present situation, in which evaluation of the project in question—unbundled SNI—is not demanded by any party that wishes to undertake it and how its putative undertaker, TransGrid, a *regulated* carrier, could avoid regulation of such proposed additional facilities or, therefore, rationally not be concerned about whether its regulators would permit inclusion of either of the two competing projects “in [its] regulated transmission network” and by so doing permit it a return on the investment.

3. “Essentially, the NEMMCO approach gives a transmission company ‘veto rights’ over the range of proposals that NEMMCO can consider...[when applying] the regulatory test.”⁶

That could be the case if NEMMCO were not legally obliged to consider other feasible alternatives *regardless of whether the proponents of a particular plan refuse to undertake them*. As I understand it,

⁵ p. 21, Section 6, Stephen King’s Statement.

⁶ p. 23, Statement of Stephen King. Michael Timothy Thomas made the same assertion (points 8.1(a) and (c)) “it is economically unsound for a proponent of a regulated asset to be able to reject a project because it may be affected by another party’s behavior....” and “TransGrid is suggesting it should be allowed to unilaterally determine that alternatives to its preferred projects are not.” (Section 4.4, p. 20, 15 May 2002) As for the first, where the behavior of “another party” will affect the balance of benefits and costs of a project it obviously must be appraised in applying the regulatory test. As to the second, I am not aware of anyone suggesting that any applicant have “veto power.”

however, far from giving TransGrid “veto rights,” NEMMCO recognized its obligation to consider the practicality of such alternatives as the unbundled SNI option independently and to accept or reject TransGrid’s rejection of it. The Code, I presume, requires NEMMCO to make an independent assessment of the costs and benefits of the alternatives to a proposal, in the course of which it cannot avoid, if only implicitly, evaluating the justifiability of TransGrid’s declination to consider the unbundled alternative.

4. “The NEMMCO approach also allows a transmission company like TransGrid to ‘game’ the regulatory test.”⁷

If my previous description of NEMMCO’s obligations is correct, it will have both the power and the obligation to prevent such gaming, by weighing the likely costs and benefits of the alternative projects presented to it against those of other possible ones. In these circumstances, I do not understand how

“While the bundled project may pass the regulatory test, at the same time it can pre-empt preferred project options that would lead to significantly greater economic benefits.”⁸

As I understand it that is precisely what the mandatory obligation of the regulatory test would prevent.

The commercial practicability of the unbundled SNI project would not depend only on its probable treatment by the ACCC some time in the future. It would depend also upon the likely motivations and behavior of the relevant participating parties. These will have a material effect also on the respective costs and benefits of the two competing proposals: the regulatory test necessarily entails an assessment of the likely behavior of the several parties under the alternative scenarios, as dictated by their respective incentives and power to effectuate them. Both assessments, in the present instance, would

⁷ p. 23, Section 6 of Stephen King’s Statement dated 15 May 2002,

⁸ p. 24, Section 6 of Stephen King’s Statement dated 15 May 2002,

have to take into account the monopoly power of the Murraylink transmission link, which the unbundled proposal would not merely leave undisturbed but actually enhance, and Murraylink's motive and ability, as an unregulated carrier with a direct commercial interest in arbitraging between the two termini of its transmission link, to maintain that differential at monopoly levels.

Fundamentally, the issue before NEMMCO was created by the fact that the Code permits or makes provision for both regulated and unregulated transmission facilities; that Murraylink, an entrepreneurial, unregulated transmitter, would have been in a position to make the use of the unbundled SNI proposal subject to its own response to the construction of those facilities and that, specifically, Murraylink would have not merely the power but the incentive to make less-than-economically-optimal use of them and by so doing diminish the prospective profitability of the investment from TransGrid's standpoint. By so doing, Murraylink would also create the regulatory risk that some portion of the investment would eventually be disallowed by the ACCC on the ground that it was not used and useful—the commercial risk cited by TransGrid and recognized by NEMMCO in rejecting that proposal. Such a recognition, if vindicated, would logically end the cost/benefit inquiry into that particular option—unless there were some way of mitigating or removing the regulatory uncertainty that contributed to that conclusion. Manifestly, a hypothetical project that is commercially infeasible is not going to promise greater net social benefit than the next best project that is indeed commercially feasible! Where the infeasibility is created by regulatory uncertainty, however, clearly the first best solution would be for the regulatory system to be reformed so that it does not permit investments to proceed that entrench or enhance market power and does not pose regulatory obstacles to the preferable projects.

Entirely apart from regulatory uncertainty, therefore, one important factor tending to make the unbundled investment impracticable for TransGrid must inevitably have weighed against that project

also in the calculation of its comparative costs and benefits—namely the differences in the motivations of the two involved carriers and in the constraints—regulatory and competitive—to which each would be subject in pursuing those interests under the two competing proposals. The critical differences are that

- *the entire TransGrid project would be subject to traditional cost-of-service regulation, whereas Murraylink would not be; and*
- *TransGrid would earn its profits by performing the transmission function exclusively, while Murraylink would earn its profits by arbitraging the difference between the wholesale prices of electricity at the two terminal points of its line, either directly or by entering into contracts at each terminal point reflecting the expected differences in their prices.*

The critical regulatory difference is that SNI would be subject to the traditional obligation to serve all parties, non-discriminatorily, and TransGrid would recover its costs through regulated rates; whereas Murraylink would be a purely private carrier and power wholesaler, free to follow its self-interest in deciding how much power to purchase and carry over its link for sale at the other end.⁹

In ordinary circumstances, Murraylink would not have the monopoly power to manipulate or increase the spread between the low-price Victoria and New South Wales on the one side and South Australia on the other, beyond the cost of transmission, because of the presence of another, regulated open-access interconnector, Heywood. But, I am informed, the Heywood facility is capacity-constrained for

⁹ In practice, Murraylink bids a required 'net revenue' into the market, for carrying power over its link. That is to say, it submits a bid to the half-hourly market for electricity, operated by NEMMCO, expressed in terms of the difference in the wholesale prices between two regions. If then the divergence between the two market prices is sufficiently high, Murraylink gets in effect dispatched by NEMMCO, in the same way as a generator would. Conceptually it can be considered as buying power from the market operator (NEMMCO) in one state and selling power to the market operator (NEMMCO) in the other state.

significant periods of time—in which event Murraylink clearly has monopoly power to maintain that spread above competitive levels—precisely analogously to the recent situation in California, when shortages of generation and/or transmission capacity evidently made it possible for multi-plant generators to withhold some portion of their capacity from the day-ahead and spot markets and by so doing leverage up the market-clearing prices sufficiently to more than compensate them for the sacrificed sales—precisely the classic behavior of a firm with monopoly power.¹⁰ The unbundled SNI option, which Murraylink understandably supports, would broaden the scope for exercise of that monopoly power and the monopoly profits it could extract from the price differentials by increasing the availability of power at the Victoria and New South Wales ends, leaving Murraylink with the classic monopolistic balancing of increasing the volume of its purchases at one end and sales at the other against restricting that flow in order to preserve or increase its margin of profit on those transactions.

Under TransGrid's proposal, in contrast, Murraylink's ability to act in this way would be severely limited by the new open access SNI link between New South Wales and Southern Australia. It would lose its bottleneck monopoly.

In the present proceeding, the relevant competing alternatives are TransGrid's unbundled SNI project, advocated by Murraylink, and its bundled project.¹¹ In assessing the likely outcomes under the two

¹⁰ Borenstein, S., and J. Bushnell, 1999. "An Empirical Analysis of Market Power in a Deregulated California Electricity Market." *Journal of Industrial Economics* 47(3): 285-323; Borenstein, S., J. Bushnell and F. Wolak. 2000. "Diagnosing Market Power in California's Deregulated Wholesale Electricity Market.: POWER Working Paper PWP-064, University of California Energy Institute; Joskow, P.L. and E. Kahn. 2001. "A Quantitative Analysis of Pricing Behavior in California's Wholesale Electricity Market during Summer 2000." National Bureau of Economic Research Working Paper #8157.

¹¹ Actually, Murraylink contended that the greatest net benefit would be produced by the combination of TransGrid's unbundled SNI project and the Snovic 400 project of Victoria Energy Network Corporation, already approved by NEMMCO—the latter in a sense an alternative to the unbundled SNI, because both produce the same increased reserve capacity for utilizing low-cost New South Wales electric power in South

alternative projects—in judging both their comparative net benefits *and* TransGrid’s claim of commercial impracticality—NEMMCO must inevitably assess the likely behavior of the several parties in the alternative circumstances. In the present context this inevitably entails assessment of what their self-interest would dictate, insofar as they are free to pursue it, and the degree to which each is or would be subject to regulatory or competitive constraint on that behavior.

The simple fact is that the unbundled SNI project favored by Murraylink would preserve and possibly greatly increase its monopoly power, by increasing supplies and reducing prices at the New South Wales and Victoria termini; and the full SNI project would eradicate it by increasing inter-regional transmission capacity, operated by a regulated common carrier. This clearly explains not only Murraylink’s preference for the former—to put it mildly—but also why that project might well be commercially impractical from TransGrid’s standpoint: this is the response to Professor Littlechild’s assertion:

“It is not clear that the ‘Unbundled’ SNI proposal introduces any additional risks for the upstream assets that would not already exist under the SNI Project.”¹²

As to its commercial practicality, not only would the profitability of the unbundled SNI venture be at the mercy of Murraylink’s incentive and ability—at times of constraints on the Heywood link—to limit the flow of power over it into South Australia, purchasing and carrying it over its own link only to the extent that it would maximize its monopoly profits. By so doing, as I have already observed, it also would subject the Unbundled SNI investment to possible disallowance by the regulatory authority, as having been either imprudently incurred or as in some portion of it not “used and useful.” As Mr.

Australia. In fact, however, NEMMCO found that the combination of Snovic 400 and the full SNI project would produce the greatest net benefits—a finding that I am not in a position to appraise.

¹² p. 6, para 6, Stephen Littlechild’s Statement.

Houston demonstrates, this regulatory uncertainty is genuine, with the regulator having the authority and responsibility to “optimize” investment for purposes of determining the regulatory rate base.¹³

The simple reason is the one I have already identified—namely, that approval of the unbundled project alone would not only leave Murraylink with very considerable unregulated monopoly power in the transfer of electric power from Victoria and New South Wales to South Australia at times of high demand—a monopoly, moreover, under no obligation to carry power for others—but expand the opportunity for its exploitation. The preclusion of competitive transmission and therefore of competitive arbitrages between New South Wales and South Australia by NEMMCO’s failure to approve the entire project would preserve and conceivably enhance Murraylink’s monopoly power over the price of electric power at the South Australian destination.

This is in no way to minimize the economic contribution of “mere” arbitrage, which, by moving goods and services from where they are less valued to where they are more valued, confers a net economic benefit. What is objectionable about Murraylink’s proposal is that it would preserve its monopoly in this particular arbitraging business when the Heywood link is capacity-constrained—an ability to control the crucial flow of power from low-cost to high-cost markets and therefore the difference between prices at both ends.

Manifestly, in these circumstances, Murraylink would find it in its interest to submit bids for flows over its transmission link in such a way as maximally to exploit that monopoly—i.e., to transmit only such amounts of power as would maximize its monopoly profits from arbitraging. Although the Unbundled SNI project increases the capability to transfer power from NSW via Victoria to South Australia,

¹³ pp. 32 -33, section 3.3.2.5, Statement of Gregory John Houston dated 28 June 2002.

Murraylink's commercial incentives and bottleneck monopoly will restrict the amount of power that actually flows. The bundled SNI project, in contrast—required to provide open access to its facilities at rates limited to cost—would produce the competitive result, compressing the difference between the market prices at the east and west ends to the cost of transmission over that critical link

In short, under a proper application of the regulatory test,

- *No party, applicant or non-applicant should or would have a veto over what other projects are considered and evaluated;*
- *NEMMCO itself has the responsibility and authority to assess claims of commercial practicability or impracticability; whether in fact it completely fulfilled that responsibility in the present case I am not in a position to say;*
- *NEMMCO is not exempted from responsibility for weighing the comparative costs and benefits of commercially practicable alternatives, whether they have or have not actually been proposed to it;*
- *when a party does in fact apply for permission to undertake a particular project, that application—the comparative merits of which NEMMCO must independently evaluate—offers at least prima facie evidence that the project is indeed commercially practicable.*
- *By the same token, if NEMMCO concludes that a particular project is not commercially feasible, it makes little sense for it to be required to subject it to a cost-benefit calculation to see whether it is or is not superior to others.*

Reconciling net benefits and commercial feasibility

The fact remains that NEMMCO's "preliminary analysis" of the net benefits of the Unbundled SNI project found them to exceed those of the bundled one for which TransGrid sought approvals. This can only mean that the additional investment costs entailed by the latter would outweigh its beneficial effects of curbing Murraylink's monopoly power: alternatively put, that the welfare loss entailed by the unbundled project, stemming from its preservation and possible increase of Murraylink's monopoly power, has a lower present value than the cost of constructing the additional SNI facilities necessary to curb it. It suggests, to put it yet another way, that the partial monopoly of Murraylink, whenever the Heywood link is at capacity, is in a sense "natural"—that eliminating it by introducing competitive capacity would entail more cost than benefit. (Manifestly, the unbundled version would not only protect Murraylink's monopoly power at such times, it would, by expanding supplies at the Victorian terminus, increase the opportunity of Murraylink to exploit it.)¹⁴

These apparent facts suggest a contradiction. How could NEMMCO, required to compare the probable net benefits of alternative projects, have found in favor of the project promising the smaller net benefits? The reason was its agreement with TransGrid's opinion that the apparently superior project, from the standpoint of promised net benefits, was not commercially feasible.

How could the project promising the greater net social benefits be commercially impractical? The answer is, in my opinion, not that NEMMCO incorrectly applied the regulatory test but that the

¹⁴ The cost/benefit calculations attempt to evaluate projects in terms of their economic efficiency consequences alone, ignoring income distributional effects. In such measures, the reduction in Murraylink's monopoly profits and, hence, producer surplus produced by the bundled SNI project is offset against the increased consumer surplus it would produce; and the resulting net welfare improvement is evidently exceeded, in present value terms, by the capital costs of producing it.

Australian institutional arrangements may have reached an impasse. The project with the greater promised net social benefit may not be commercially feasible because (1) some of its benefits will accrue to Murraylink in the form of increased monopoly profits and because of (2) uncertainty about how regulators will eventually treat its investment costs—threatened with partial stranding *because of the unregulated monopoly power of Murraylink*.

Observe, in this connection, that Murraylink itself would have the power, under its preferred arrangement, to determine how much of the TransGrid unbundled investment would not be “used and useful” and therefore subject to possible disallowance by the regulatory authority. This suggests that it should be required to abandon the role of external obstructer of the TransGrid proposal and underwrite the regulatory risks of the arrangement to which it would have NEMMCO confine TransGrid—risks that it would be in the happy position of having the power to aggravate or mitigate.

Competitive Neutrality

Professor Stephen King emphasizes the importance of the ACCC’s application of the goal of competitive neutrality in developing the regulatory test—specifically, as the ACCC put it, “limit[ing] the ability of networks to use the regulated status of their investments to crowd out competitive alternatives....[P]roposed regulated augmentations should not unreasonably pre-empt nor distort potential unregulated proposed augmentations.”¹⁵

The competition at issue in applications of the regulatory test, I am informed, is that between alternative possible investments, such as (1) TransGrid’s proposed bundled and unbundled SNI lines, (2) any other possible regulated transmission augmentations and (3) all other market-driven investment options,

including a) potential unregulated interconnectors of the type already installed by Murraylink and b) additional generation and demand-side management at the import location. In applying the regulatory test, the principle of competitive neutrality should ensure the avoidance of artificial advantage or disadvantage to any of these potential options relative to the proposed transmission investment—specifically, to ensure that the various costs and benefits that can be attributed to the proposed transmission facilities and the other investment options neutrally reflect their comparative economic efficiencies.

In that context, Murraylink’s characterization of TransGrid’s entitlement to a regulated reasonable return on investment as a “subsidy”¹⁶ is presumably a contention that it would violate the requirements of competitive neutrality because a “subsidy” implies that the recipient would obtain an unjustified advantage over other options. This is absurd, particularly in view of the uncertainty associated with the regulatory regime: I understand there have as yet been neither definitive statements from the regulator nor sufficient history to reduce uncertainty about the regulator’s approach to optimization; and I gather all parties agree that TransGrid’s investments would be subject to disallowance from the rate base if the regulatory authority considered them either imprudently undertaken or not “used and useful.” In any event, regulation is typically rationalized in terms of the need to emulate the result that would be produced under competition. By this standard, it is economically ignorant to characterize as a “subsidy” a return on investment more or less equivalent to the competitive level.

The incorporation in regulated rates of a reasonable return on investment should be regarded as an economically sensible, competitively neutral compensation for the obligation of the regulated entity to

¹⁵ pp. 6-7, Stephen King’s Statement.

provide an open access interconnector at regulated rates and subjection of its costs to regulatory approval or disapproval. Murraylink, in contrast, is free of any such obligations; its principal role is that of an unregulated arbitrager. Free of the direct competition of SNI, as it proposes, the unbundled SNI project that Murraylink advocates would increase its monopoly profits, by increasing the supply of power at the Victoria end of the link, increasing the times at which and amounts by which it can take advantage of the spread between Victorian prices and the ones prevailing at the South Australia end, and giving it the unconstrained ability, once the Heywood link had reached its capacity limit, to engage in only so much arbitraging as would maximize its profits—monopoly profits, because it would have the unchallenged power to limit the flow and maintain the differential at monopoly profit-maximizing levels.

Whatever their comparative merits as judged by their respective costs and benefits, I cannot see by what reasoning the unbundled SNI project, advocated by Murraylink, can be found in compliance with the competitive neutrality test, when it would preserve Murraylink's monopoly in both interconnection and in power trading—i.e., arbitraging between Victoria and South Australia (as always, when the Heywood link is congested)—in preference to the project that would dissipate both these monopolies.

Moreover, by preserving if not increasing the spread between prices of the power at the Victoria and South Australia termini of the Murraylink facility, the unbundled SNI project favored by Murraylink would clearly violate one of the expressly stipulated aspects of competitive neutrality—between greater, economically efficient importations of power into Southern Australia, with a consequent effect of downward pressure on its prices, and additional local generation and demand-side limitations. The

¹⁶ Witness statement of Anthony Steven Cook, 14 May 2002,

benefit/cost calculations suggest that this benefit could be at the expense of inefficient additional investment in transmission capacity, but regulators have for decades been finding ways of permitting utility companies to recover additional costs in such a way as to interfere minimally with allocative efficiency—by such practices as multipart tariffs and Ramsey pricing.

Dr. Anthony Cook says that competitive neutrality requires that the costs and benefits to be weighed in the regulatory test be only ones that can be captured by an unregulated alternative;¹⁷ Professor Littlechild agrees.¹⁸ I find such claims incomprehensible, in the sense that they would clearly distort the regulatory test, which manifestly requires the assessment of *all* the costs and benefits of the alternative projects considered, regardless of which portions of them fall upon or accrue to particular sub-groups of participants, such as “regulated” or “unregulated” interconnectors.

Finally, in contending that the only benefits to be weighed are benefits appropriable by unregulated interconnectors—but not by unregulated power traders or arbitragers—Murraylink is manifestly in conflict with the Code’s economically correct goal of maximizing the sum of producer *and consumer* surplus. By the former criterion the alternative that entails the highest possible monopoly profits would receive the highest grade in the benefit/cost comparisons!

Clearly, as I have already suggested, the ideal regulatory regime should not allow for transmission investments that do not take into account the desirability of mitigating market power or that reinforce it; or put obstacles in the way of socially optimal investments, as measured by the cost/benefit test. And—in a sense alternatively—when the regulatory framework is such as to make the socially optimal

¹⁷ pp. 83-84, para 218-222, Statement of Dr. Anthony Cook.

¹⁸ p. B-8, Statement of Professor Stephen Littlechild.

investment commercially infeasible, it should not rule out second-best investments because of their inferiority to a theoretical option that will in fact never be effectuated.

Of course, to return to the original issue, if NEMMCO was correct in concluding that the unbundled option was not in fact commercially practicable, the fact that it would produce superior net economic benefits would seem to be irrelevant—unless, as I have already suggested, institutional changes were made sufficient to resolve the apparent conflicts between and among commercial practicability, competitive neutrality and economic efficiency.