Making relation-(or “transaction-”) specific investments is nothing new for public utilities. Traditionally, the utility invests in the distribution network, such as the wire that connects from the network to the individual subscribers’ premises in the case of telecommunications or electrical supply. While the literature has examined the role of regulation in mitigating problems facing utilities in such a situation (Williamson 1983; Goldberg 1976), less attention has been paid to the problems of suppliers to utilities who have to make relation-specific investments in order to produce the supplied product. Important examples of such suppliers are independent power producers (IPPs) and cogenerators. Both are required to make significant long term relation-specific investment if they are to supply power to the grid, and such long term relationships are governed by contracts which bind the parties together and mitigate surplus-eroding opportunistic behavior. The purpose of this paper is to examine the nature of the contracting relationship between utilities and IPPs, with an emphasis on the appropriate level of contractual completeness to address the hold-up problem.¹

Section 1 reviews the problem of relationship-specific investment in exchange, which results in long term contracting to mitigate the potential for future opportunistic hold up. In the absence of contractual guarantees, after the facilities have been constructed, the utility might renege on the contract and refuse to buy the electricity in an attempt to force a lower price on the IPP. Alternatively, the IPP may withhold power in an attempt to obtain a higher price.² We provide a brief non-technical introduction to how contracts may be written to offer protection for the parties. The apparently obvious way of maximizing the safeguards to the parties is to “write it all down” in an exceedingly complete contractual document. In theory, a complete contingent contract would protect the parties’ rights against all contingencies. The problem, however, is that in practice contracts tend to be remarkably incomplete. In addition, while the more complex the contract, the more
protection can be provided, the complexity carries some high costs, including both the expense of drafting the agreement as well as potential losses in flexibility. In section 2, we provide a formal model of the contracting process that examines the tradeoff between contractual flexibility and precision and offers an explanation of the completeness of the terms actually adopted in contracts. Finally, section 3 is by way of a concluding discussion, briefly providing some implications for the structure of regulated electricity supply.

1. Introduction to Economic Considerations of Long-Term Contracting with Relation-Specific Investment

Substantial investment in relation-specific assets may bind the parties in a long-term relationship. To govern the recurring exchange which results, the parties often elect to enumerate duties or to constrain behavior through the use of contracts. Contractual completeness is a device to protect parties from “hold-up” risks, which are nicely defined by Klein (1992):

> Hold-up risk refers to the possibility that transactors may violate the intent of their contractual understanding by expropriating the quasi-rents from the specific reliance investments that have been made by the transacting parties.

The fact that hold-up, by its very nature, is a breach of an agreement, may imply that the party doing the hold-up is acting with guile to secure an advantage at the expense of the other party. While it would be clearly naive to assume that guile is not a basis for hold-ups, Klein, in contrast to Williamson (1979; 1985), argues that hold-ups normally occur not because of guile and the exploitation of asymmetric information on the part of one of the transactor but because “...a sufficiently large unanticipated event destabilizes [the] contractual relationship.” Klein’s argument lends support to the notion that contracts by their very nature are incomplete, since it is unanticipated events that lead to hold up.

If parties to a contract believe that hold-up is primarily a byproduct of unanticipated exogenous changes, recognize the impossibility of complete contracts, and understand that the more complete the contract the more expensive it is to write and live under, what are some of the implications for contract design? Combine this with the notion, also proposed by Klein, that there exist devices other than court enforcement of contracts. These include what Klein calls “enforcement capital,” which brings about compliance with agreements. Then it is not surprising that long-term contracts can sometimes be exceedingly complicated, attempting to spell out everything, or somewhat vague, with future contingencies being left to negotiation by the transacting parties.

Let us now illustrate some of the difficulties in writing contracts to prevent hold-up. No matter how detailed the contract, the possibility of hold-up cannot be eliminated. This can be illustrated with the famous Fisher Body-General Motors case. To encourage Fisher to make the transaction-specific investment required if it were to make General Motors’ bodies, the contract provided for a ten-year exclusive dealing clause. General Motors agreed to purchase all of their closed