CER/04/338

VIPP5 Non Green Auction:

Principles Paper

Introduction:

This paper outlines the principles of the VIPP5 Auction.

VIPP5 – Main terms

1. In the VIPP5 auction of non-green capacity, ESB will offer 400 options in total, which include any long-term options allocated in the VIPP4 re-launch auction, each option entitles the successful bidder to purchase 1MWh per hour.

2. Bids will be deemed to be eligible and awarded using the following criteria:

i.) All Bids must be at or above the reserve price.

ii.) Suppliers can bid for either firm or non-firm Options. Bids for firm Options will be evaluated before bids for non-firm Options.

iii.) Higher price bids will be awarded first in each category.

3. Limits that apply during VIPP5

i.) ESB Independent Energy Limited (ESBIE) are limited in that they are prohibited from exercising VIPP Options such that their cumulative volume of Synergen purchases and active VIPP Options will not exceed the lower of 400MW or the volume available to the next largest Independent Supplier from any combination of its own (or affiliated) generation sources, Active VIPP Options or Synergen purchases.

ii.) The amount of VIPP5 options that any Supplier can hold will be limited such that the equivalent capacity that it could hold (either directly or through an affiliate in a group structure) from any combination of generation plant owned by itself, Synergen purchases and VIPP5 options would be no greater than 400MW. The Supplier must relinquish VIPP5 options to the extent that its Total Equivalent Capacity would exceed 400MW.

iii.) No bidder may have more than 200 options of VIPP5

iv.) A Supplier's Total Equivalent Capacity will be calculated as the sum of VIPP5 options, Synergen purchases and generation plant owned by itself (either directly or through an affiliate in a group structure) but excluding inter-connector capacity, green energy and small (<15MW) CHP.

4. As in VIPP4, the energy price will continue to be a flat rather than profiled as a time-of day price.

5. Fuel Indexation will apply in VIPP5. Hedgeable indices will continue to be applied as per previous VIPP auctions. Due to the unprecedented volatility levels in the market, we are implementing a deadband. One end of the deadband will be set by the January fuel index.

The other end of the deadband will be calculated using the fuel costs submitted to CER for the October 2004 tariff review thus:

Fuel	**Price**
Coal	$83.94/t
Oil	$180.8/t
Gas	27.14£p/th

6. As in VIPP4, ESB shall publish the energy price 2 days before the start of the month to which it applies.

7. The ramp-up and ramp-down arrangements will consist of 3 months Non-Firm and 10 months Exercisable options. There will be no booking fee for non-firm option during January, February and March, while it will be 25% of the Option fee from April onwards. A staged booking fee will apply to firm options i.e. 15%, 20%, 25% of the Option Fee for January, February and March respectively, and 25% from April onwards.

8. The energy and reserve prices are calculated as trading point prices, the energy price being €42.9/MWh.

9. The reserve price for options is to be set as €10,220/option/ calendar month payable when the options are declared active, i.e. prior to the start of the relevant month. This is different to VIPP4. €10,220 is the equivalent of €14/MW/hour.

10. Suppliers with Longer Term options from VIPP4 can decide that these options become VIPP5 options by bidding them at the ACP (Auction Clearing Price) in the VIPP5 auction. If these long term VIPP4 options are bid in this way, then the supplier is granted that many VIPP5 Options. If they are not, these options will be made available to other VIPP suppliers for VIPP5.

11. ESB estimates that the above capacity and energy prices will give a 10% discount on the generation and supply components of the LVMD customer tariffs (assuming that under the VIPP scheme, suppliers efficiently optimise their portfolio of contracts and inter-supplier trading occurs.)

12. VIPP suppliers will be responsible for the payment of appropriate TUoS, DUoS, PSO and Capacity Margin charges.

13. Option holders will be entitled to purchase Top-Up and Secondary Top-Up.

14. Spill will continue to be allowed. Any review of the Spill mechanism including the Spill floor and CRSP will lead to a review of the VIPP price. Spill has been modelled as being the SMC used by CER in the determination of the Top-Up prices as published in the 2005 Top-Up Paper (CER04/331a), with day and night multipliers of 1 and 0.8 respectively.

15. Eligible customers that leave and return to PES will be entitled to revert to published PES tariffs.

16. The VIPP5 contracts last from 1st January 2005 to 31st December 2005, longer-term options will not be offered. Given that VIPP is due to end early in 2006, VIPP5 may be extended to early 2006. The CER and ESB will work together to explore the development of a new wholesale product for independent suppliers. Any changes in published tariffs during this time will be reflected in the VIPP price.

17. The process of calculating the VIPP price starts with the collation of confidential sample customer load profiles from MRSO. The PES tariff is applied to these profiles less the network, capacity margin and PSO prices to give a remnant price, used for the basis of offering the discount. The VIPP price calculator is then used to calculate the optimum mix of VIPP options, top-up and spill to meet the aggregate load profiles and yield the required discount.

18. Conclusion of VIPP: Once the third IPP has been commissioned (expected to be January 2006), the VIPP scheme will ramp down. The CER and ESB will work together to explore the development of a new wholesale product for independent suppliers.

19. The CER intends to restrict VIPP sales to customers from the LV, GP and Domestic categories.

20. The price has been calculated on the basis that VIPP customers will not get WPDRS. CER requires suppliers to demonstrate to CER's satisfaction that a winter demand reduction scheme is offered to customers to incentivise load reduction during the winter. CER will monitor the WPDRS scheme to ensure that no customer supplied by VIPP receives WPDRS.

Any breach of this will result in payment to ESBPG of the WPDRS payments plus an administration charge, and will be considered a breach of contract.

21. Initially, the burden of any CO_2 levies will be borne by ESB, but this is subject to re-examination if a new methodology of applying costs is introduced.

Timetable of key milestones

Fri 15th October:	Publish VIPP5 Draft Principles Paper
Fri 22nd October:	Closing date for comments to Principles Paper
Tue 2nd November:	Publish Final Principles Paper
	Publish Invitation to Bid and Contracts
Fri 12th November:	Final date for submission of bids
Mon 15th November:	CER evaluation of bids
Tue 16th November:	ESB PG sign contracts and suppliers are notified

An Overview Guide to the Non Green VIPP5 Auction

Introduction

The Virtual Independent Power Producer (VIPP) scheme was introduced in the wake of the liberalisation of the Irish electricity market. The objective of the scheme is to foster independent electricity generation by providing discounted power to independent Suppliers, allowing them to develop a customer base and enhance other aspects of their business in anticipation of the construction of generating plant. VIPP5 is the 5th such auction.

Who may bid?

There are certain pre-requisites that bidders must satisfy in order to participate in the auction.
Successful bidders must hold a Supply Licence under Section 14(1)(b) of the Electricity Regulation Act, 1999 and must have entered into the Trading and Settlement Code, the Framework Agreement and Transmission and Distribution Use of System Agreements. Appropriate evidence of satisfaction of these criteria must be included with the Bid Form.

Successful bidders are required to have an Approved Credit Rating or must provide Security Cover[1]. In submitting their bids, bidders shall include confirmation that, if successful, they will be in a position to satisfy these requirements

The Auction Process

Power under the VIPP agreement is sold by auction. The total amount of power available under the VIPP scheme is divided up into (400-VIPP4 Long Term) options. Each of these options confers upon the successful bidder the right to exercise the option to purchase 0.5 MWh of Energy per half-hour at the Option Energy Price for that particular month. The charge to the supplier to hold this right is the Option Charge, which is a fixed charge per month (in VIPP5 this will be €10220). The Option Energy Unit is equivalent to 0.5MWh of electrical power in every Trading Period. No options will be auctioned for less than the reserve price (in VIPP5 this will be €10220).

Options will be awarded to bidders in order of descending bid price until the reserve price is reached. If there are not enough options to satisfy the number of bids at a particular price, the options will be apportioned on a pro-rata basis. Firm options will be awarded before Non-Firm options. As the name suggests, Firm options require a payment each month, whether activated or not. Once the options have been awarded, they may assume any one of three states, Active, Exercisable or Relinquished. Active options are those

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[1] *Security Cover = 1.135*[1*((FCO+NFCO)*ACP)+(1460*A*EPP0)], where FCO = Number of Firm Options, NFCO = Number of Non-Firm Options, ACP = Auction Clearing Price, A = Total number of Contracted Options and EPP_0 = Initial Energy Purchase Price. This was reduced due to the Option Fee being paid at the beginning of the month.*

options that are used to meet the energy requirements of the VIPP supplier. All Active Options are subject to the Option Fee in a particular month. Exercisable options are those options reserved by a supplier for use not later than six months from the start of the VIPP agreement, and may be either Firm or Non-Firm. If these options are Firm, then a Booking Fee of 25% of the Option Fee applies, with 15%, 20% and 25%applying in January, February and March respectively. Alternatively, if these options are Non-Firm, then there is no Booking Fee until April, from when it will be 25%. Finally, a Relinquished option is one which to the VIPP supplier has waived all rights. A Supplier cannot start to relinquish options while it still has exercisable options.

Operation of the Auction

The number of options and the Clearing Price for the auction will be released in two rounds. In the first round, mid-November 2004, the total number of options available for auction (400) less the VIPP4 Relaunch Long-Term options will be auctioned.

Once the December declarations are made by the VIPP4 Suppliers, any Relinquished VIPP4 Long-Term Options will be released. These additional Options may result in a lower Clearing Price and will be apportioned using the bids from the original auction, i.e. no further bids are made at this time.

The Modelling Process

In order to determine the appropriate Energy Option charge, a comprehensive programme of computer modelling is undertaken.

- The process begins with the collation of a number of anonymous customer load profiles from the Meter Registration System Operator (MRSO). These load profiles are used as inputs, along with relevant ESB Customer Supply tariffs to a model that calculates the wholesale price of electricity from ESB Power Generation to ESB Customer Supply.
- A percentage discount on the generation and supply element of the ESB PES Price (not more than 10%) is subtracted from this wholesale price to give a target price that the VIPP supplier should pay for its power.
- The VIPP price calculator model is updated with current Spill and Top-Up prices.
- The load profiles are again used as inputs, along with various combinations of Option and Energy charge. The model takes a particular voltage group of load profiles (e.g. LV, MV, all, etc.) and combines them to form an aggregate, and using the costs of purchasing energy (i.e. required VIPP volume times energy price) and Top-Up, combined with potential revenue from Spill, it calculates the actual cost (Demand-Weighted Average) of supplying the customer demand. This is done by choosing the optimum number of VIPP options to purchase that minimise the €/MWh cost.
- The combination of Option and Energy Charges that yield the Demand Weighted Average that equals the target price as calculated by the Tariff model are then chosen to be the Option and Energy Charges for the VIPP Auction.

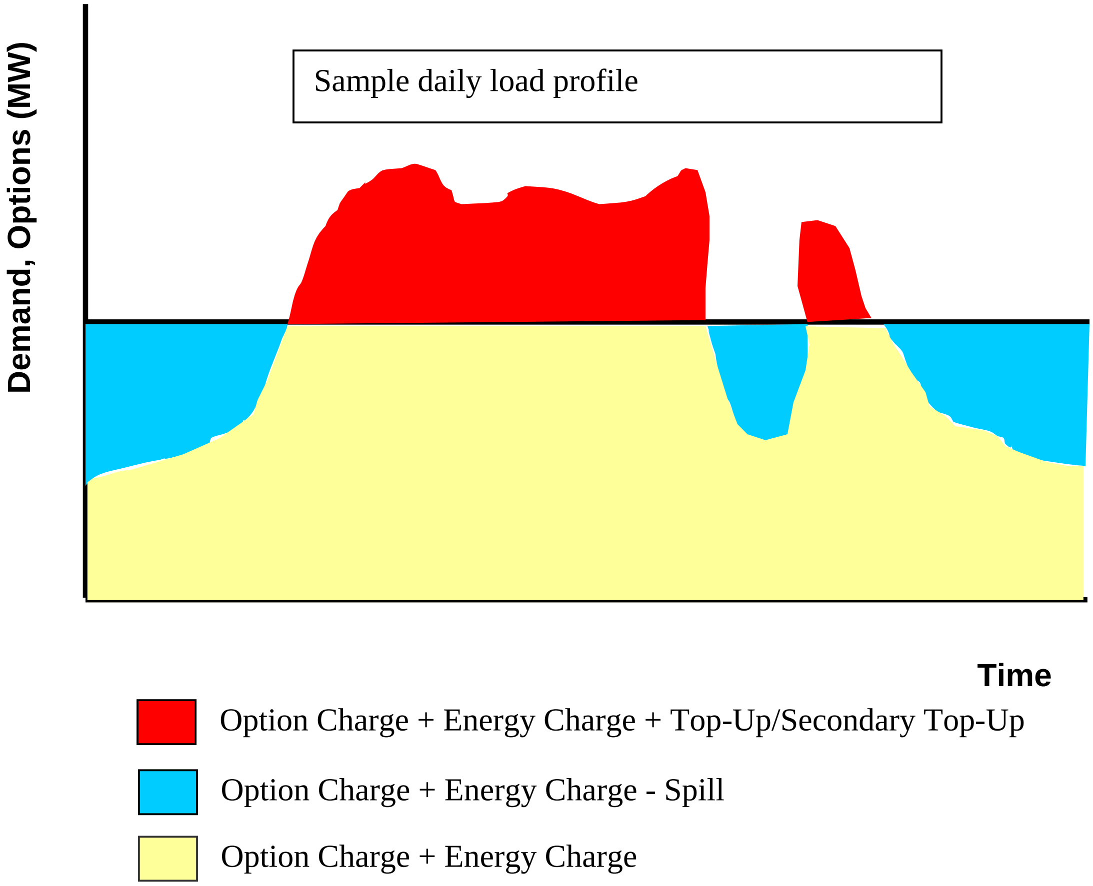

Figure 1: Optimising VIPP Options.

Fuel Indexation

Fuel Indexation is applied to ensure that ESB Power Generation is relatively neutral to changes in the price of power generation, an exposure that is catered for in the selling of ESB PG power to ESB PES under the Bulk Power Agreement. The VIPP energy price is agreed upon before the auction, but varies monthly according to fluctuations in ESB's overall fuel cost. This variation of the Energy Price is detailed in the VIPP contract, and the mechanism of adjustment is based upon hedgeable gas, coal and oil price indices and financial exchange rates. At the time of the auction, the reference Energy Purchase Price (EPP_0) is set. A reference Base Energy Price (BEP_0) is also calculated, using the fuel indices and financial exchange rates for January. As the year progresses, the monthly indices are updated, and each month, a BEPt (Base Energy Price for the month *t*) value is computed. This BEPt value has a variable and fixed element, the variable element being computed using the fuel indices and financial exchange rates relevant to the current month, while the fixed element uses fuel data for January and financial exchange rates relevant to the current month. Each month, the Monthly Fuel Indexation (MFI) is calculated as being the difference between the current month's BEP value and January's BEP_0 value. The Energy Purchase Price for a particular month is calculated as being the launch Energy Price (EPP_0) adjusted by the MFI value for that particular month. Note that if the CER approves any changes to published tariffs then the VIPP5 prices will also be changed.

Conclusion of VIPP

Once the third IPP has been commissioned, the VIPP scheme will ramp down, offering 200MW of power at full price (i.e. no discount will be offered) for a further 12 months. The CER and ESB will work together to explore the development of a new wholesale product for independent suppliers.

Glossary of Terms

Act	the Electricity Regulation Act, 1999;
Bid Form	Part 6 to this Invitation to Bid;
Bidder Registration Letter	Part 5 to this Invitation to Bid;
Commission or CER	the Commission for Energy Regulation established pursuant to Section 8 of the Act;
Eligible Customer	has the meaning given to it in Section 27 of the Act;
ESB	the Electricity Supply Board;
General Notice	Part 1 to this Invitation to Bid;
Glossary	Part 2 to this Invitation to Bid;
GWh	one million (1,000,000) kWh;
Introduction	Part 3 of this Invitation to Bid;
Invitation to Bid	this Invitation to Bid in the Non Green VIPP4 Auction issued by the Commission;
MRSO	Meter Registration System Operator;
MWh	one thousand (1,000) kWh;
Non Green VIPP4 Auction Agreement	Part 7 of this Invitation to Bid;
Operational Date	has the meaning given to it in the grid code;
Option Energy Limit	0.5 MWh of energy in a half-hour settlement period.
Option Unit	that size of an option for which a distinct bid will be accepted and which

	confers an option to purchase 0.5 MWh of Energy in each Trading Period under the terms of the Non Green VIPP4 Auction Agreement.
PSO or Public Service Obligation	has the meaning given to it in Section 39 (11) of the Act.
Related Entities	any person, body corporate, partnership, association, or other legal entity of whatsoever form which controls or is controlled by a bidder or is under common control with a bidder, whether through the holding or controlling of a majority of voting rights or the right to appoint or remove a majority of directors or the exercise of a dominant influence or the power to direct the policy of the bidder or entity as the case may be;
Supplier	a person having a licence to supply electricity to Eligible Customers under Section 14 (1) (b) of the Act;
Trading and Settlement Code	has the meaning given to it in Statutory Instrument No. 49 of 2000 entitled Electricity Regulation Act, 1999(Trading Arrangements in Electricity) Regulations 2000;
Use of System Agreements	the Transmission Use of System Agreements and the Distribution Use of System Agreements;