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Dear Sir,

Re: Open letter seeking industry views on proposals to restructure application fees

Introduction

1. The structure of application fees for Connection and Use of System Agreements was last reviewed in the run-up to BETTA back in 2004. With the benefit of experience since BETTA implementation and taking account of possible market developments over the next few years, National Grid believes that it is timely to review whether the existing structure is as effective as possible and proposes changes for implementation from April 2010.
2. National Grid believes the main drivers for change are:
 - Maximising clarity and simplicity for customers
 - Taking account of very large applications
 - Taking account of the offshore regime
3. This document outlines proposals to restructure the application fee tables in the Statement of Use of System Charges and National Grid would welcome feedback from industry participants in relation to these proposed changes. Please email comments to nick.pittarello@uk.ngrid.com by 4th January 2010 for consideration.

Scope

4. The scope of the proposed changes relate specifically to Tables A and B of Schedule 2 of the Statement of Use of System Charges and most of the changes regard primarily to application fees for generation entry.

Background

5. National Grid receives application fees from Generators, Directly Connected Customers and Distribution Network Operators for a number of reasons and a summary of those reasons and the range of the associated fees are described in Table 1 below:

Table 1: Fee Types and Charges

Purpose	Range of Fees Payable (excl VAT)
New Bilateral Agreement	£25,000 - £250,000
Modifications to existing Bilateral Agreements	£25,000 - £250,000
Applications to increase TEC	£10,000 - £17,000
Applications for Limited Duration TEC	£1,000 - £30,000
Applications for TEC Exchange Rates	£15,000 - £45,000
Statement of Works	£4,000 - £17,000
Other administrative contract changes	£2,000

6. The most material application fees relate to new, or modifications to existing Bilateral Agreements, and for generation schemes these fees depend on the transmission capacity requested and location of the connection site. In accordance with Electricity Transmission Licence Condition C8 paragraph 7(b), National Grid is required to provide an offer of connection within a maximum of three months following receipt of an application.
7. Application fees are intended to recover the costs incurred by National Grid for the provision of the above contractual changes. In order to provide a competent offer of connection National Grid would, for example, undertake the following work:
- Pre-offer discussions with customers
 - Validation of connection application data
 - Power system analysis to identify network implications
 - Derivation of options for appropriate connection design
 - Assessment of physical delivery options including outage, planning, environmental and construction constraints
 - Financial considerations and internal governance processes
 - Offer construction through contractual and legal framework
8. Customers can elect to fix an application fee (i.e. that's it, regardless of the actual cost) or have the fee reconciled against actual costs incurred. In instances where a given application proceeds to completion, the total application fee is refunded in full to the Customer.

Reflections on the existing tables and proposed changes

9. This section describes six proposals to reform the application fees and identifies the key questions for which National Grid seeks feedback from industry participants.

Proposal 1 – remove zones

10. The existing Schedule 2 of The Statement of Use of System Charges consists of eight pages of tables with varying application fees, and to the uninitiated, it may not be immediately clear which application fees are applicable in which circumstances. It is proposed therefore that the first objective of this review is to reduce the number of application fees and to make their applicability clearer.
11. The array of application fees is mainly driven by the number of zones (NGC South, NGC North, SPT South, SPT North, SHETL South, SHETL North), which multiplies each category by six. The rationale for the zones is in turn driven by “boundaries of influence” where more than one Transmission Owner (TO) may be required to determine the impact of a given connection application or modification on the system. The GBSO is itself charged application fees by other TOs and the boundaries of influence define when a TO would expect to become involved. Although boundaries of influence remain relevant today, normally only one additional TO will actually be involved in the derivation of a connection offer and hence it may be simpler to define an application fee by the number of additional TOs involved.
12. It is proposed therefore that in order to aid simplicity and clarity, the application fee by zone is removed, but instead an incremental application fee is added per TO involvement defined using the existing boundaries of influence map.

$$\begin{array}{rcccl} \text{Application} & & & & \text{Fee per TO} \\ \text{Fee} & = & \text{Core Fee} & + & \text{Involved} \\ & & & & \text{(if applicable)} \end{array}$$

13. The boundaries of influence map and when fees additional to the Core amount would be payable are shown in Appendix 1 – those in brown would be applicable for onshore applications and those in blue for offshore applications (discussed later under Proposal 5).

Question 1

Do you believe the existing application fee tables could be clearer?

Question 2

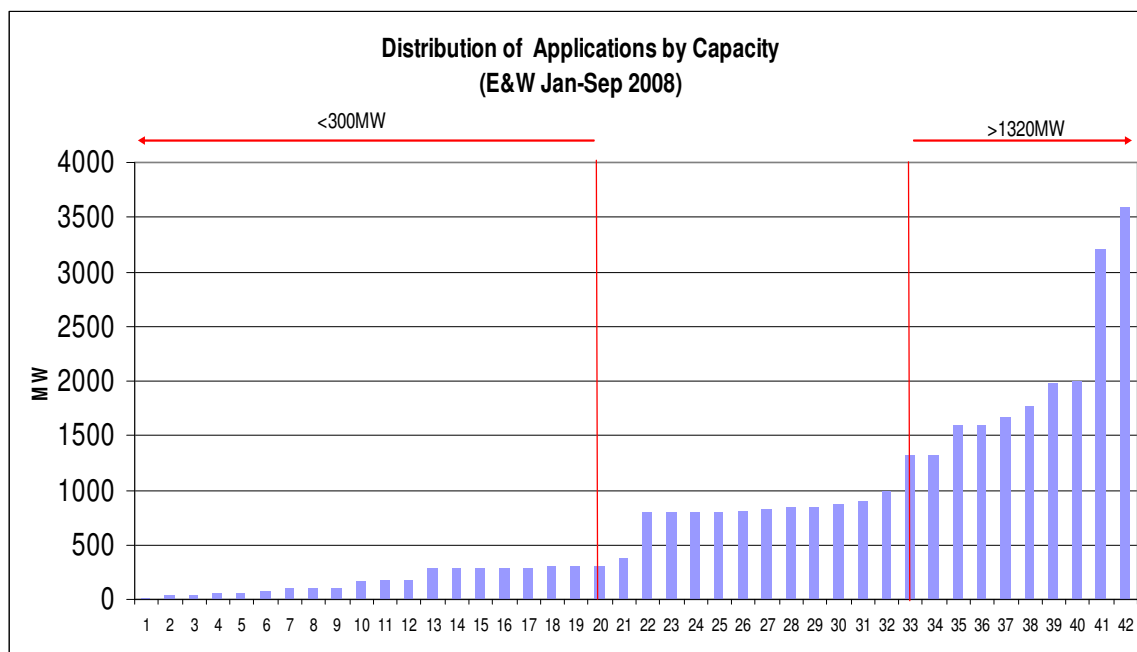
Do you agree that replacing zones with an application fee increment per TO involvement based on the boundaries of influence map would aid clarity by significantly reducing the number of application fees?

Question 3

Do you have any other ideas to simplify or reduce the number of application fees?

Proposal 2 – revised capacity threshold categories

14. The existing tables include fees for five capacity threshold bands (<100MW, 100-300MW, 300-500MW, 500-1000MW and >1000MW). There is a link between the size of a connection scheme and the degree of work required to provide an offer of connection which is why application fees increase with capacity.
15. The histogram below shows a snapshot distribution of the generation capacity applications and modifications received in E&W between Jan-Sep 2008.



16. The histogram shows that it could be reasonable to rationalise the capacity thresholds into fewer bands. For the period shown above, about half of the applications are less than 300 MW and it may be appropriate to define this point as the first threshold.
17. In considering drivers for step changes in the costs of application fees, one of the main causes of additional work is the possible requirement for a new transmission line. Power stations larger than 1320MW (the maximum permitted single loss, defined in the GB SQSS) will almost certainly require a new double circuit transmission line. It seems appropriate therefore to define another threshold at this point¹.
18. On the basis of the above, National Grid is proposing to reduce the capacity thresholds from five to just three bands as follows:

Proposed Threshold Categories
<300MW
300-1320MW
>1320MW

Question 4
Do you agree with the reduction in the number of capacity threshold bands?

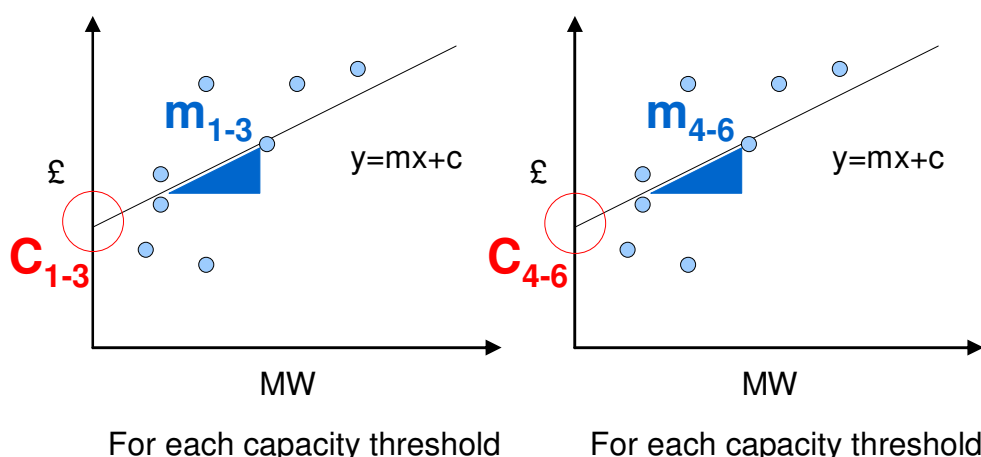
¹ Following the outcome of the SQSS review group report GSR007, National Grid will shortly be consulting on the appropriate charging of frequency response for large infeed losses. It is intended that implementation of any final recommendations would be reflected in the 1320MW threshold.

Proposal 3 – maintaining cost reflectivity

19. National Grid has built up a sample of the costs required to deliver new offers or modifications to existing agreements. In so doing, it is possible to use linear regression from these samples to derive generic application fees from data collected in recent years.
20. Given the widening of the capacity threshold bands and in order to maintain cost reflectivity as much as possible National Grid is proposing to divide the application fee charge into a base rate and a £/MW rate for each capacity threshold and to use a rolling two or three year regression analysis to inform those fees².
21. The advantage of this approach is not only that cost reflectivity is maintained, but it is also robust to applications with very much higher capacities. Over the past year or so National Grid has seen connection applications from new generators in excess of 3600MW and with the commencement of the offshore regime it is anticipated that further applications in this order of magnitude are likely in the future.
22. Lines of regression can also be used to derive a generic application fee for schemes where an additional TO is involved. Therefore, it is possible to derive an application fee table structured as follows:

Table 2: Application Fees and Regression Analysis

Capacity Band	Core Fee		Per Additional TO Involved (if applicable)	
	Base (£)	Rate (£/MW)	Base (£)	Rate (£/MW)
<300MW	c ₁	m ₁	c ₄	m ₄
300-1320MW	c ₂	m ₂	c ₅	m ₅
>1320MW	c ₃	m ₃	c ₆	m ₆



² Regression analysis calculates the statistics for a line by using the “least squares” method to calculate a straight line that best fits the data. In statistics, linear regression refers to any approach to modeling the relationship between one or more variables denoted y and one or more variables denoted X, such that the model depends linearly on the unknown parameters to be estimated from the data.

23. The Core Fee regression will not include charges paid to other TOs and the “Per Additional TO Involved” numbers will be derived from invoices that National Grid has paid other TOs for particular schemes, again sub-divided into the three capacity bands. In total, up to six lines of regression could be plotted where possible. Using existing data samples, the following parameters provide an indication of the Base c_{1-6} and £/MW m_{1-6} fees:

Table 3: Indicative Application Fees Using Regressed Existing Data

Capacity Band	Core Fee		Per Additional TO Involved (if applicable)	
	Base (£)	Rate (£/MW)	Base (£)	Rate (£/MW)
<300MW	21,000	60	13,000	20
300-1320MW	26,000	50	No data	No data
>1320MW	55,000	30	No data	No data

24. It has not been possible to regress data for the 300-1320MW and >1320MW categories for additional TOs involved because there are no recent reconciled applications of this magnitude. It is proposed therefore that until additional data is available, the £13,000 Base and £20/MW Rate derived from the <300MW category are used instead.
25. An analysis of how the indicative application fees above compare to the existing application fees in the Use of System Statement of charges is provided in Appendix 2. In summary, application fees would be generally lower than today’s in most regions (and especially SHETL north) with the exception of NGC South where there would be significant increases for the >1320 category. National Grid believes that these fees are more cost reflective than the existing fees.
26. Finally, it is proposed that indicative application fees are capped at £400,000. Although highly unlikely that an application fee would even approach these levels, National Grid believes that this would be the maximum level of cost that could reasonably be expected to be incurred over the application timescales for even the most challenging submissions. This is based approximately on the effort of a principal power system engineer, senior power system engineers, power system design engineers plus other legal and commercial inputs for an offshore application with up to four onshore entry points.

Question 5

Do you agree dividing application fees into an overhead and a £/MW rate is sensible to maintain cost reflectivity?

Question 6

Do you have any other suggestions on maintaining cost reflectivity of application fees if wider capacity threshold bands are used?

Question 7

Do you agree there should be an explicit cap on application fees?

Proposal 4 – premium for fixed fees

27. Although all application fees are returned to customers on completion of a scheme, customers have the option to fix application fees or to have them reconciled so that only the actual costs incurred are held until completion (in the event an application terminates, lapses or is withdrawn, National Grid retains the fee if it is fixed, or invoices/credits any reconciled amounts so that the customer only incurs actual costs).
28. New applications are generally more expensive than modification applications and therefore using a single table incorporating fees for all application fee types represents an element of risk for National Grid for those new applications that elect to fix fees and subsequently terminate, lapse or withdraw.
29. National Grid believes one way to manage this risk is to include a percentage premium on fixed price application fees. This is not an unusual proposal in the same way fixed price electricity or gas contracts include a premium to manage risk over prevailing market rates.

Question 8

Do you consider a premium should apply to fixed price application fees?

Proposal 5 – treatment of offshore generation

30. The offshore regime brings with it four challenges for application fees:
- No previous cost precedent; and
 - Zone applicability; and
 - A two stage offer process; and
 - Embedded transmission.
31. In relation to the cost precedent, until National Grid builds an understanding of the costs involved in designing offshore connection applications, it is proposed that the same charges should apply to offshore as for directly connected generation. However, given that it is anticipated that these costs are likely to be higher than the equivalent onshore application, it is proposed that offshore generation applications pay an application fee which is temporarily on an indicative basis only.
32. Additionally, a very large offshore application may require entry at a number of onshore connection points. National Grid proposes that an application fee applies per onshore connection point because each connection point would require similar work described in paragraph 7. However, the total cost of the indicative application fee should not exceed £400,000 as discussed in paragraph 26.
33. In terms of “zone applicability”, if an offshore connection application is made with an onshore connection point in the “NGC South” boundary of influence zone, it is proposed that the application fee that applies is:

$$\text{Application Fee} = \text{Base Fee} + (1 \times \text{Additional TO fee})$$

34. This is because the GBSO, E&W TO and the OFTO are involved in delivering the connection offer. If the same offshore application was to connect at a connection

point in “NGC North” boundary of influence zone, then the application fee would be

$$\text{Application Fee} = \text{Base Fee} + (2 \times \text{Additional TO fee})$$

35. This is because SPT would be an additional affected TO also involved in assessing the application.
36. In terms of the two-stage process, although reconciliation of indicative application fees normally takes place around six months following acceptance of a connection offer, the offshore regime is an extended process including a tender for the identification of an Offshore TO (OFTO). In order to minimise the bureaucracy of reconciling and then levying a further application fee once an OFTO is chosen, Option 1 could delay reconciliation of application fee until the selected OFTO has provided a firm connection design to the customer. Alternatively (Option 2), an application fee could be reconciled in the normal manner, and any costs incurred by the selected OFTO could be invoiced to the customer at a later date. Another option (Option 3) might be for National Grid to invoice the Core and any applicable onshore TO application fee initially and reconcile as normal, and following selection of the OFTO invoice the additional TO increment for the OFTO work.
37. With respect to embedded transmission, this situation can arise where it is more economic and efficient for an OFTO to connect to a distribution network rather than the MITS. In these instances, analysis carried out by the DNO will be chargeable to the GBSO, however it is not proposed that any additional application fee is levied as initially it is anticipated offshore applications will be on an indicative basis only.

Question 9

Do you agree that offshore application fees should be on an indicative basis only until more certainty on actual costs is available?

Question 10

Do you agree that an application fee should be paid on a per onshore connection point basis?

Question 11

Do you agree with the approach to using the “additional TO fee” as a means of calculating the appropriate application fee for offshore generators?

Question 12

Which of the three options would you prefer for the treatment of the two-stage offshore offer process, or can you suggest other alternatives?

Question 13

Do you have any other thoughts or observations with respect to the Offshore regime and application fees?

Proposal 6 – restructure tables by “entry/ exit/ other”

38. The final proposal is cosmetic and simply restructures the tables by entry/ exit/ other categories. We believe this will be helpful clarification to customers and

make for easier reference. The table below illustrates the net effect of all the proposals described above.

Proposed Application Fee Table Design

Prices for New Bilateral Agreements and Modifications to Existing Bilateral Agreements

Add →

ENTRY	New/ Mod/ Change MW	Core Fee		Per additional TO involved		Fixed
		Base (£)	Rate (£/MW)	Base (£)	Rate (£/MW)	Price
	<300					+X%
	300 to 1320					+Y%
	>1320					+Z%

* Offshore Indicative Only

Directly connected only reactive service provider	
Suppliers and Interconnector Users	
Non LDTEC products (TEC Trading, STTEC, SNSTF, Permanent TEC Exchange)	
LDTEC	Table 14
Temporary TEC Exchange Rate Request	Table 15
	No change
	No change

EXIT	New Supply Point	
	Addition/ Reduction of transformer at existing site	
	Modification to current scheme in progress	
	Request for Statement of Works at existing supply point	
	Modification application following request for Statement of Works	

OTHER	Other contract changes	
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All prices quoted do not include VAT
Application fees are refundable upon completion of the scheme

Question 14

Is the proposed Application Fee table design an improvement over the existing structure?

Examples

39. This section provides four examples illustrating how the proposals would work.

Question 1: How would an indicative application fee for a 3000MW generator seeking to connect near Hinkley Point be calculated?

- Only the base fee for the >1320MW capacity band applies

Application Fee = Overhead_{Base>1320} + (3000 * £/MW_{Base>1320})

Question 2: How would a fixed application fee for a modification to an existing bilateral agreement at Mybster for a 200MW generator be calculated?

- Only the base fee for the <300MW capacity band applies (it is above the boundary of influence on Scottish Power)
- Fixed fee premium would also apply

$$\text{Application Fee} = [\text{Overhead}_{\text{Base}<300} + (200 * \text{£/MW}_{\text{Base}<300})] * 1.X$$

Question 3: How would an indicative application fee for a modification application to increase TEC from 250MW to 310MW at Peterhead be calculated?

- The cumulative capacity defines the applicable capacity band as 300-1320MW
- The base fee applies and an increment for an additional TO as Scottish Power is an affected TO

Application Fee =

$$[\text{Overhead}_{\text{Base}300-1320} + (110 * \text{£/MW}_{\text{Base}300-1320})] + [\text{Overhead}_{\text{ExtraTO } 300-1320} + (110 * \text{£/MW}_{\text{ExtraTO } 300-1320})]$$

Question 4: How would an indicative offshore application fee (fixed not available) for a 2000MW generator located in the Irish Sea be calculated?

- Identify likely onshore connection site(s) – in this example north Wales
- For each connection site treat as if an onshore generator – 2000 MW in north Wales
- Base Fee applies and an increment for an additional TO because an OFTO is involved

Application Fee=

$$[\text{Overhead}_{\text{Base}>1320} + (2000 * \text{£/MW}_{\text{Base}>1320})] + [\text{Overhead}_{\text{ExtraTO } >1320} + (2000 * \text{£/MW}_{\text{ExtraTO } >1320})]$$

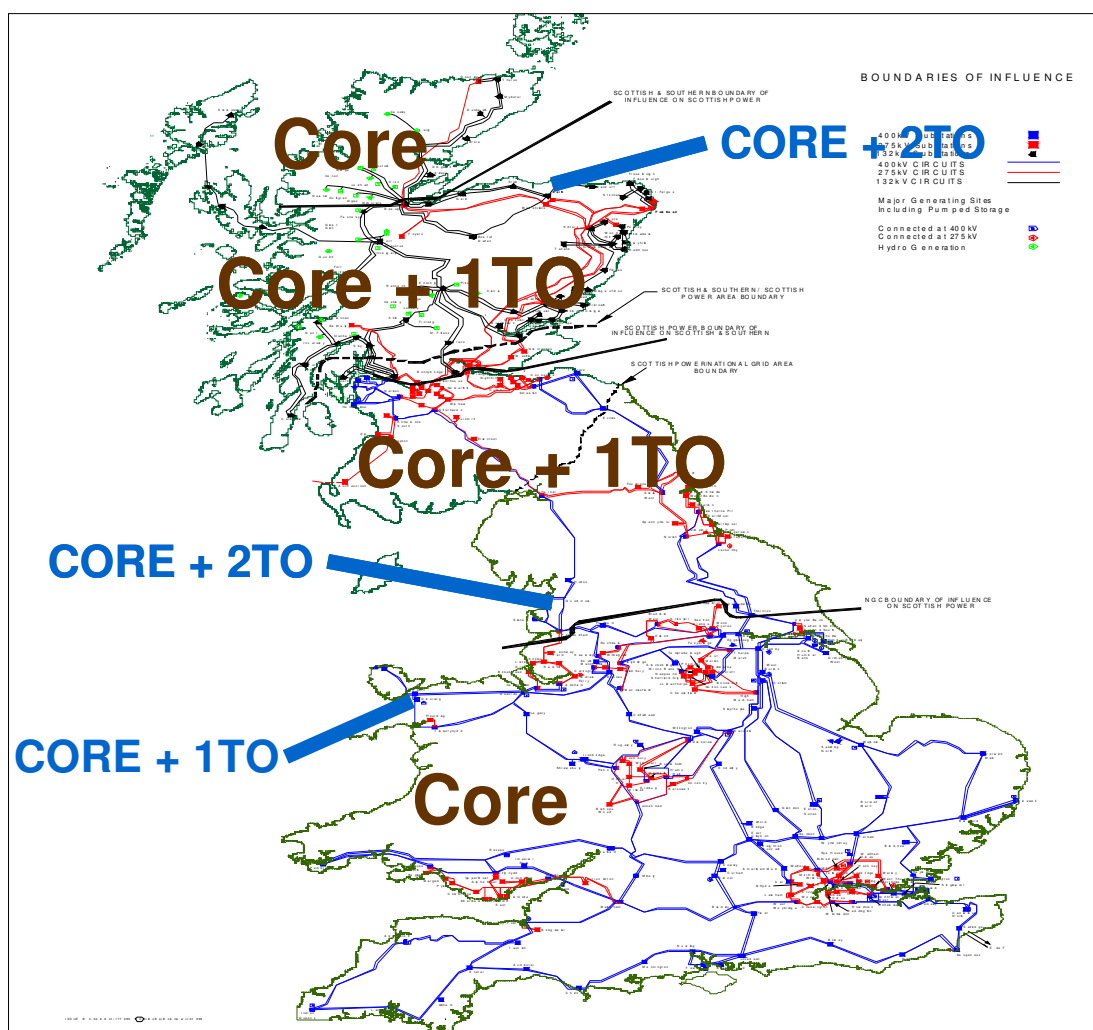
Question 15

Are there other examples that would benefit from clarification?

Request for Feedback

40. Industry participants are kindly invited to provide comments on the above proposals. National Grid would be grateful to receive contributions to all, or only a subset of the questions posed in this document and those comments should be emailed to nick.pittarello@uk.ngrid.com by 4th January 2010.

Appendix 1 – Boundaries of Influence



Appendix 2 – Comparison of Existing to Proposed Indicative Application Fees

Existing Application Fees							Indicative Proposed Fees						
MW	NGC South	NGC North	SPT South	SPT North	SHETL South	SHETL North	CORE		TO			CORE + TO	
	CORE	CORE + TO				CORE	Base	£/MW	CORE Total	Base	£/MW	TO Total	Total
101	25000	55000	51000	71000	81000	81000	21000	60	27060	13000	20	15020	42080
299	25000	55000	51000	71000	81000	81000	21000	6060		13000	5980	18980	57920
301	50000	110000	92000	127000	157000	157000	26000	50	41050	13000	20	19020	60070
1319	70000	160000	160000	230000	250000	250000	26000	15050		13000	26380	39380	131330
1321	70000	160000	160000	230000	250000	250000	55000	30	94630	13000	20	39420	134050
3600	70000	160000	160000	230000	250000	250000	55000	39630		13000	72000	85000	248000