



The future rules... on NEC4

MICHAEL FOSTER – DIRECTOR, DRIVER TRETT UK EXPLAINS FOUR KEY AREAS OF CHANGE, AFFECTING QUANTITY SURVEYORS, IN THE APPLICATION OF NEC4

It is rare that change is made to the rules of evaluation that govern change. Just look at JCT and how often it tinkers with the valuation fences. You know what I mean, bill rates, adjusted rates, fair rates and daywork. Those rules have remained static since the day I put a tie on and became a quantity surveyor (QS). Now look at the NEC, its rules have evolved over four generations and development has been driven by both industry and end users. The end user that I focus on is the QS, and that includes me.

When it comes to NEC you have to be ahead of the wave. I refer back to my surfing

days in Newquay - if the wave was ahead of you, you weren't going far. Lots has been written, and said in seminars, on the topic of NEC4 during recent months running through the detail, clause by clause. This is all very useful but, like most things in the life of a QS (including valuation rules) I have had to do the graft and work it out myself. In surf speak, I am now ahead of the wave.

When it comes to valuing compensation events (CEs), the recent step change is significant. Tendering departments must ensure that they are ahead of the wave, or at least on top of it during this transitional period. Decisions made now, at tender

stage, will have a direct impact on profitability because the site QS will be applying those decisions at some point in the near future.

The ethos behind NEC is that the contractor should not be out of pocket if events arise post contract award that are outside of its control. The contractor should be no better or worse off than had the event not occurred. NEC invented the Defined Cost plus Fee mechanism for evaluating change, which was in opposition to the principles under JCT, where the heart of its valuation rules lie in the unit rates and prices used to price the whole project. If a

contractor under-priced a JCT job, then it lived and died by those unit rates and prices when pricing change, because a tender insufficiency would magnify into a greater loss when used to price a variation.

NEC attempted to avoid the valuation disputes that arose under JCT evaluation rules by developing its Defined Cost plus Fee concept. NEC has a greater level of fairness built into its core, and those rules have worked well over the years, but they did include some inherent practical difficulties that caused disputes. NEC has clearly listened to industry and the result is simplification. Key changes are shown in Boxes 1-4. →

BOX 1 - DEFINING DEFINED COST – EVALUATING COMPENSATION EVENTS

Under NEC3, Defined Cost has a unique definition depending on the Main Option Clause selected, with one area of divergence between the options being the approach to pricing subcontractors. The changes made in NEC4, in pursuit of simplification, are pointed:

Option	NEC3	NEC4
A & B	"Defined Cost is the cost of the components in the Shorter Schedule of Cost Components whether work is subcontracted or not..."	"Defined Cost is the cost of the components in the Short Schedule of Cost Components"
C & D	"Defined Cost is the amount of payments due to Subcontractors..." and "the cost of components in the Schedule of Cost Components for other work"	"Defined Cost is the cost of the components in the Schedule of Cost Components..."

Under Option A&B, the QS follows the same route and refers to the Short Schedule of Cost Components, irrespective of whether or not the CE includes subcontracted elements. The sharp-eyed QS will have noticed we are now using the Short Schedule, not the Shorter Schedule, but will have also concluded that the new schedule is longer. In this case, more is less and I expand upon this later on.

The above change has greater effect under Options C&D. Under NEC3, the contractor previously priced its own in-house resource using the Schedule of Cost Components but would separately evaluate the subcontracted element based upon payments due to its subcontractors. There were two separate parts to the evaluation. However, in the new NEC4, the distinction between subcontractor and contractor resource has disappeared from the definition of Defined Cost.

When valuing CEs the rule is simple: Under Option A&B, go to the Short Schedule of Cost Components and when on Option C&D, go to the Schedule of Cost Components. There is now no divergence on subcontractors as they are now included in both schedules, at Item 4.

BOX 2 - APPLICATION OF FEES

The old and new provisions are as follows:

NEC3	"The Fee is the sum of the amounts calculated by applying the subcontracted fee percentage to the Defined Cost of subcontracted work and the direct fee percentage of the Defined Cost of other work"
NEC4	"The Fee is the amount calculated by applying the fee percentage to the amount of Defined Cost"

Under NEC3, the contractor pre-priced two different percentages. One that is applied to the subcontractor element and a second applied to those resources provided by the contractor. Those percentages could differ but were quite often identical, typically reflecting the fact that a contractor did not see the need to differentiate. NEC4 has conflated them into one fee percentage, leading to less burden on the QS when preparing quotations and the removal of arguments over fee-on-fee that frequently existed.

The Future Benefits

On the basis that I have just been instructed on an NEC2 dispute, I am sure NEC3 will

be around for years to come. However, by giving the end user what it wants in the new NEC4, including conflating several percent-

BOX 3 - THE SHORT SCHEDULE OF COST COMPONENTS UNDER OPTION A&B

Putting aside the minor change in title, the first noticeable change is an increase in length as it is devised to capture more cost than the previous edition. The second change results from the deletion of several add-on percentages that were embedded in the schedule.

It was the application of numerous percentages that generated complication. There were in fact several other fees to be applied before applying the subcontracted fee and direct fee, including the people overhead percentage and design overhead percentage.

NEC4 has been successful in eliminating unnecessary complication by deleting the add-on percentages. From an estimator's perspective, this is a good thing as only one percentage requires pre-price at tender stage: the fee. It is also much simpler for the on-site QS, who now uses one percentage rather than several applied to different parts of the evaluation.

The Short Schedule is longer because expenditure previously captured by the pre-agreed percentage additions must now be captured as cost under each respective cost component. Other broad amendments to the cost components are:

- **People** - Previously calculated by reference to amounts paid but are now evaluated using pre-agreed hourly rates in the contract data. It is therefore necessary at tender stage for estimators to determine what those hourly rates are and to ensure that they capture the overhead percentages that no longer apply.
- **Subcontractors** - A new stand-alone cost component, meaning all subcontractor cost associated with a CE is evaluated using the Short Schedule of Cost Components (Item 4).
- **Charges** - Evolved into a longer list to compensate for the removal of the people overhead percentage. The QS now separately identifies and prices in the CE quotation around a dozen additional heads of cost.
- **Manufacture and fabrication** - Previously assessed by calculating amounts paid but now assessed by reference to pre-agreed hourly rates included in the contract data.
- **Design** - Still assessed by reference to hourly rates stated in the contract data. However, the percentage addition no longer applies meaning that the pre-agreed hourly rates must be increased to compensate for the loss of the percentage addition.

Overall, the changes pretty much reflect what industry wants. Pre-agreed hourly rates are nothing new and the elimination of unnecessarily complicated multiple percentages should also avoid some valuation arguments.

BOX 4 - THE SCHEDULE OF COST COMPONENTS UNDER OPTION C&D

The full schedule has also been redrafted, but the change is different. A summary of the main points is as follows:

- **People** - Remains largely unaltered. NEC4 has resisted the switch to pre-agreed hourly rates, which is likely to arise from the need for clients and the project manager (PM) wanting to audit actual cost. This is because the Schedule of Cost Components serves a dual role for valuing CEs but also in ascertaining the Price for Works Done to Date.
- **Subcontractors** - Also recognised as a new stand-alone cost component, meaning all subcontractor cost associated with a CE must be recorded.
- **Charges** - Significantly amended as the Working Area overhead percentage has been deleted.
- **Design** - Still assessed by reference to hourly rates stated in the contract data. However, the percentage addition has been deleted and accordingly the agreed hourly rates must be increased to compensate for the deletion of the percentage addition.

ages into one, increasing the use of agreed hourly rates, and including subcontractors within the schedules should streamline the

CE quotation process. That said, I will not be getting rid of my NEC3 and users guides, just like I still have those for NEC2. ■