

December 2024



# **CECA NEC4 Bulletin**

**CECA Member Briefing:** 

# Bulletin Nr 48 - Assessing weather delays under NEC contracts

### Introduction

Training and development support is a key part of CECA's core offer for its membership and working in conjunction with GMH Planning it has delivered a programme of training events around the NEC Form of Contract across several CECA UK regions.

In addition to this training, a series of monthly NEC Contract Bulletins are being produced for both Contractors and Subcontractors to improve practical awareness on key topics within the NEC. The coverage, whilst not exhaustive, is intended as a general overview on some of the contractual principles to increase a wider understanding in support of more sustainable outcomes.

For the purposes of these bulletins a contractual relationship between a "Client" and "Contractor" is assumed. The same rules/principles also apply if the contractual relationship is between a "Contractor" and a "Subcontractor" and so the term "Contractor" will be used to describe both parties.

These bulletins are based on the latest NEC4 family of contracts, but the same principles and rules would apply where parties are engaged under an NEC3 form of contract.

### Coming next month:

### Bulletin Nr 49 - Programme at tender stage?

Please respond to Lucy Hudson should you require any further information on the CECA NEC4 Bulletins via e-mail: lucyhudson@cecasouth.co.uk.

For further advice or guidance on the NEC details please visit www.gmhplanning.co.uk where you will find a wealth of free NEC Guidance Notes, NEC FAQs, and other helpful measures.

# Bulletin Nr 48 - Assessing weather delays under NEC contracts

Climate change is having visible effects on the world and is rarely out of the news with extreme temperatures, rainfall patterns changing and sea levels rising. Weather can have a significant impact on the delivery of construction projects. This bulletin will explore how NEC contracts deal with weather and how the resultant risk profiles can be altered. Like any risk, it is important the parties understand their specific liabilities.

What is the NEC general approach to weather? Regardless of the contract option, NEC4 incorporates a concept of "compensation events" to address unforeseen circumstances that would not be a Contractor risk, including adverse weather conditions. If weather conditions exceed a certain threshold (usually a "one-in-ten-year" event value), the Contractor can consider the resultant impact in terms of time and cost as a compensation event.



Weather as a compensation event: Clause 60.1(13) is the only core contract clause that refers to weather. It states that weather is to be recorded within a calendar month at the place stated in the Contract Data. If the value recorded in any calendar month by comparison with the weather data (as referenced in contract data) is shown to be higher than the "one-in-ten year" event value, then it will be a compensation event. Only the difference between the value recorded and the "one-in-ten year" event weather date value is considered

**Could weather be claimed under any other compensation events?** The effect of weather in the very extreme <u>could</u> be applicable under 60.1(19) if it affects the Contractor completing the whole of the works by the planned Completion shown on the Accepted Programme e.g. a hurricane, tornado or major flooding. It is important to recognise that this clause is intended for major unexpected "force majeure" type events and not intended to be the "get out" clause simply to be used if none of the other compensation event reasons are applicable.

Which weather measurements will be relevant? These are found in Contract Data part 1. The standard weather measurements to be recorded to be assessed against listed in section 6 of contract data, are:

- cumulative rainfall
- number of days with rainfall more than 5mm
- number of days with minimum air temperature less than 0 degrees Celsius
- number of days with snow lying (at a specified time of day).



There is also space for additional weather measurements to be added that could be pertinent to a particular type of project or location. These could be elements such as wind speeds, hot temperatures, frost or fog. If no additional weather measurements are added, then only the weather elements in the bullet points can ever lead to a valid compensation event.

Where do the weather data values come from? Contract data will state who the weather measurements will be supplied by; it is commonly the Met Office who produce various standard reports. As shown below, the data analysis is based on the period up to 2010. As this does not take into consideration the 13 complete years up to 2023, it is

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acknowledged that this could affect the longer-term trends". The Met Office figures are based on statistical analysis of weather between 1971 and 2010, and therefore does not incorporate any weather from the last 14 years. This report of historical data can be obtained from the Met Office for a cost in the region of £250. Some Clients may purchase the report and include it within the Site Information to prevent each tenderer from having to purchase the report as to what the Contractor should assume as "one-in-ten year" weather events.

#### Sample report:

# Met Office

## Location based planning averages

Prepared for: Site: Weather Data from:

Issued on Monday

#### 1-in-10 Year Values (1971-2010)

Month	Daily Rainfall Total (mm)	Days of Rain > 5mm	Days of Snow	Days with Snow Lying at 0900 UTC	Days of Freezing					
January	137	10	5	4	3					
February	105	8	5	3	0					
March	102	8	3	1	0					
April	85	7	2	0	0					
May	86	6	0	0	0					
June	93	7	0	0	0					
July	78	5	0	0	0					
August	99	7	0	0	0					
September	123	8	0	0	0					
October	149	10	0	0	0					
November	161	11	1	0	0					
December	147	11	3	1	0					

Month	Minimum Ground Temperature (Deg C)	Days of Ground Frost	Minimum Air Temperature (Deg C)	Days of Air Frost	Mean Wind Speed (mph)	Sunshine Total (hours)
January		21	-7.1	15	14.3	82
February		20	-5.9	14	14.1	106
March		17	-4.0	7	13.4	162
April		12	-1.8	3	12.3	217
May		5	1.2	1	12.1	262
June		1	4.8	0	11.2	273
July		0	7.9	0	11.4	281
August		0	7.1	0	11.4	267
September		2	4.0	0	11.2	187
October		7	-0.4	1	12.1	142
November		15	-3.6	7	13.2	104
December		19	-5.5	12	13.2	74

Why do the Met Office records stop at 2010? Speaking to the Met Office whilst writing the bulletin, they were able to confirm they are currently updating their weather data for both Location Based (modelled) report options and traditional Station Based (actual land-based stations/equipment). It is anticipated that data incorporating the statistical analysis up until 2020, should be included in the second quarter of 2025 for Station Based reports, hence incorporating a further ten years of data. Location Based reports and 1-in-10's updated data will be available later in 2025.

What location should the weather records be based upon? The obvious answer is close to the project site, so it is truly representative. The Met Office have over 3500 modelled extraction points in the UK where they have data available for as shown on their website: https://www.metoffice.gov.uk/services/business-industry/construction/downtime-report-for-extension-of-time.

Selecting the closest location to the Site is not always the best one to choose, as factors such as elevation and proximity to the sea could give weather conditions in these locations that could be significantly different. For example, the nearest weather records might be from five miles in land of a coastal site, so maybe using the weather records from 15 miles further up or down the coastline might be more representative.

What if there are no weather records available near to a particular site? Where the site is more remote and not near one of the Met Office locations, the contract data does allow for "assumed weather measurements" for each calendar month where records are not available. If the stated contract location was some distance from the actual site, it would leave a degree of uncertainty for which the Contractor would have to price any such risk.

**Proving weather is a compensation event.** This should be very straight forward and not in any way subjective as either the weather data is, or is not, above a one-in-ten year event threshold. Based on the report above, if there are more than ten separate days of at least 5mm of rain in January then this would trigger a compensation event.

Assessing the impact for a weather delay. This is the more difficult bit and is highly likely to be subjective. If a one-inten year event for snow on the ground in December for the site location is three days, and there is proven to be snow on the ground for six days, the Contractor has to prove the impact of the extra over effect of the additional 3 days. There may also be further subjectivity about the scientific classification of snow, as in at what point does snow become slush or ice, or what percentage of the site needs to be covered in snow?

**Compensation event assessment as actual or forecast defined cost?** This is one of the rarer occasions where this type of compensation event will normally be based on <u>actual defined</u> <u>cost</u> rather than forecast defined cost. It will not be known until after the calendar month as to whether or not the one-in-ten year events will have been exceeded, so any assessment is likely to be based upon the actual effect that has been experienced. The amendments to clause 63.5 also suggest this to be the case when it states that the compensation event assessment "takes into account any delay caused by the compensation event already in the Accepted Programme". If last month the Contractor was running a week late, and then it is proven that the delay was due to weather in excess of a one-in-ten year event, the Contractor can still claim for that delay impact as part of the compensation event.



How long does it take to get the Met Office data each month? – The Met Office can issue the data report showing the actual weather values experienced within one week of the end of the calendar month in question. Such reports typically cost between £150-180/month for a report of actual data for any given month.

**Engineering and Construction Short Contract:** This contract takes a different and simpler approach to weather. It states that for it to be a compensation event, the Contractor will have needed to have experienced weather for "periods of time, each at least one full working day, which are in total more than one seventh of the total number of days between the starting date and the Completion Date". This approach would also suggest that the assessment of the weather impact is much more likely to be later in the project (and always retrospectively). It will not be known until nearer the end of the works how many days the project will have run for and therefore if the delay has been more than one seventh of the total number of days.

Summary: Under NEC contracts only certain weather impacts are recoverable as a compensation event. Contract data part 1 needs to be understood as to what weather events would be recoverable as a compensation event and what risk the Contractor will have to consider in their tender price/programme. If an event triggers a one-in-ten year event is straight forward to prove, but the resultant impact is likely to be more difficult and subjective to ascertain.