

SEE

221
229 ✓

BETWEEN/

S.E.E. COMPANY LIMITED
T/A SOUTH EAST ELECTRIC COMPANY

PLAINTIFF

AND

PUBLIC LIGHTING SERVICES LIMITED
AND PETITJEAN & COMPANY (U.K.) LIMITED

DEFENDANTS

Judgment of Mr. Justice Murphy delivered the 19th day of July 1985

In this case the plaintiffs claim is as against the first-named defendants (Public Lighting Services Limited) in contract and against the secondly named defendants (Petitjean & Company (U.K.) Limited) in tort. The action against both defendants arises out of the circumstances in which the defendants supplied certain equipment in connection with the installation by the plaintiffs of a flood lighting system at Marley Grange, Rathfarnham, in the city of Dublin for Rocky Creek Company Limited who are the owners of the sports grounds used by Three Rock Rovers Hockey Club.

The case involves complex questions of fact - particularly technical facts relating to the erection of galvanised steel mast lighting columns as well as difficult questions of law.

In or about the month of November, 1982 the Rocky Creek Company Limited retained the services of B.J. Featherstone, an electrical engineer, to advise them in relation to the installation of the proposed floodlighting system at their grounds in Rathfarnham and to draw up a specification of the work necessary for installing an appropriate system and obtaining tenders for the installation thereof.

Mr. Featherstone duly prepared the specification and submitted it to a number of electrical contractors, including the plaintiffs in the present case. The specification (at page 8 thereof) described the lighting columns to be used in the following terms:-

"The contractor shall supply and instal and erect in positions as shown on drawings, eight no. 14.5 metal hinged type lighting columns, complete with flange plate and single access door. Each column to be complete with cross arm head frame to accommodate five 2 K W metal halide floodlights. The columns and head frame to be hot dipped galvanised finish to B.S.729/71 maintenance free pattern. Each column to be complete with maker's recommended anchor bolts. The columns shall be capable of accommodating a minimum headweight of 95 kg. excluding the head frame, and windage area of 1.72 sq.m.

The columns and head frame to be of Messrs Petitjean Continental 14.5m pattern or equal and approved. The lighting columns to be installed directly in accordance with the manufacturer's instructions and recommendations. The contractor including for supervising the installation of foundation bolts when the foundation basis are being prepared by others".

The electrical engineer, in addition, sought tenders on an alternative basis, namely, by substituting 16 metre lighting columns with climbing steps and platform in lieu of the hinged columns or masts. In both tenders, however, the lamps to be used were designated as Philips HNF 002 floodlighting projector units.

The plaintiffs were one of eight or so electrical contractors to whom the specification was submitted. The plaintiffs in fact submitted tenders on the alternative bases. A tender in the sum of £63,243.00 for the installation based on the hinged mast and

sum of £58,303.00 using 16 metre fixed masts. Neither of these tenders was accepted and indeed the clients subsequently instructed Mr. Featherstone to review his specifications with a view to reducing significantly the cost involved. However, the means by which the plaintiffs arrived at the figures included in the tenders and the manner in which they carried on business with the first-named defendant is of some importance. The first-named defendant has an exclusive agency in the Republic of Ireland for the products manufactured by the secondly-named defendants. Accordingly, Mr. Brendan Hall, the Managing Director of the plaintiff Company, contacted Mr. McGinn the Chief Executive of the first-named defendant Company to obtain certain information with regard to the masts or lighting columns involved in the project. Mr. Hall in his evidence says that he informed Mr. McGinn of the weight to be carried by the masts; the type of lamps to be used; the windage area involved and that the location of the project was at Marley Grange. In fact Mr. McGinn, who was called as a witness on behalf of the plaintiffs, confirmed that this information was given to him by Mr. Hall. In turn he says he transmitted the same information but omitting the location of the project, to the secondly-named defendants. In substance this account of the transaction is confirmed by two documents. First, there is a quotation dated the 29th November, 1982 from the secondly-named defendants to the first-named defendants quoting for the hinged columns and the fixed columns. Furthermore, the quotation sets out a description of the lamps and a reference to the weights which they can carry and the windage to which they may be exposed. Secondly, there is in turn a quotation by the first-named defendants to the plaintiffs setting out in identical terms the information obtained from Petitjean. In fact it is clear that the documents enclosed with the Petitjean quotation were in turn copied and forwarded to the plaintiffs. That

documentation consisted of some four pages setting out particulars of the two types of column or mast involved and some detail relating to their structural capacity, as well as information with regard to the mode of erection. In fact the only difference between the parties in relation to the evidence at that stage of the transaction was the fact that Mr. Hall stated that he has been advised by Mr. McGinn that the hinged columns were not in fact suitable for the project and that this was apparent from the technical information included in the quotation. Mr. McGinn had no recollection of any such discussion.

By letter dated the 3rd February, 1983 Mr. Featherstone, the consulting engineer, altered the specification. The main alteration was substituting a 15 metre fixed mast for either the 14.5 metre hinged mast or the 16 metre fixed mast envisaged by the original specification. The weight-bearing capacity was maintained at a figure of 95kg and the windage area at 1.72sq.m. Apparently the letter of the 3rd February, 1983 was a formal confirmation of an alteration previously discussed with some one or more of the contractors by whom tenders had been submitted. Certainly the first-named defendants (to whom enquiries were directed in relation to the matter by more than one electrical contractor) had instituted enquiries from Petitjean with regard to the 15 metre mast as early as the 14th of January 1983. Whilst Mr. McGinn spoke of discussing this equipment with officers of the secondly-named defendants it seems clear that the actual discussion took place on the telephone on the 14th of January 1983 between Ms. Jacinta Fayne who was Mr. McGinn's secretary and a Ms. Maureen Wales who was an Executive of Petitjean. Neither party to the telephone conversation gave evidence but the essence of the communication between them was confirmed in telex messages passing between the two Companies.

Ms. Fayne sent the following message for the attention of Ms. Wale:-

"Ref price for 15 mtr. flange plate col given per telephone today. Could you pls. confirm price per tlx especially that £328.40 includes c/arm support".

The material parts of the reply to that enquiry are as follows:-

"Re enquiry regarding 15m fixed columns

1. Eight Nos. BO, fixed masts, 15m mounting height, double door, standard flange plate with anchor bolts, C/W cross arm to carry five X floodlights 95kgs. Windage 1.72m².
2. Climbing rungs for above E/O £66.55
3. Safety cable for above E/O £24.70

Delivery approx. 12/14 weeks from receipt of order.

Spec not sighted".

This information was in due course transmitted to Mr. Hall who prepared a revised tender which he submitted on the 7th of March 1983. That tender was duly accepted and the plaintiffs ordered the 15 metre BO masts from the first named defendants on the 15th of March 1983 and they in turn ordered the masts and certain accessories from the secondly-named defendants. Petitjean acknowledged the order on the 15th of March 1983. The acknowledgment sets out details of the ancillary equipment but unfortunately it was not possible for the parties to indicate whether these accessories did or did not include certain locking nuts, the use of which was a matter of controversy between them. It was not clear precisely when the masts were erected or by whom the contracting work was done. Mr. Hall did give evidence that the masts were properly erected and Mr. Featherstone confirmed that they were erected under his supervision. In any event, sometime on the night of the 12th or the morning of the 13th of January 1984 one of the masts collapsed and it appeared that others were in a dangerous condition.

It was necessary to take them all down and their condition was examined by the interested parties later that month. It is not disputed that a number - if not all - of the masts showed cracking immediately above the point at which the mast was welded to the flange plate. Indeed evidence was given that Petitjean offered to weld or otherwise reinforce the masts at that point.

The plaintiffs claim that the first-named defendant was guilty of breach of contract in advising or representing that the masts supplied would be suitable for the particular project. Alternatively it was contended that those defendants were in breach of contract in supplying masts which were not of merchantable quality or fit for the purpose for which they were supplied. As against the secondly-named defendants it was contended that they owed a duty of care to the plaintiffs, even though they were not aware of their identity, because they, Petitjean, advised the first-named defendants wrongly and negligently as to the suitability of the masts in question in circumstances in which the secondly-named defendants should have been aware of the fact that the masts would be supplied to a third party who would be relying on the professional care and skill of Petitjean and that any failure by them to exercise the appropriate degree of care and skill would probably result in loss or damage to that third party. Put in another way, Petitjean ought reasonably to have had in contemplation as being affected by their acts the person to whom the masts were to be ultimately supplied.

Mr. Hall did, as I have said, give evidence to the effect that Mr. McGinn had advised him that the BO masts were suitable for the project. Indeed, Mr. Hall also said that Mr. McGinn had advised him that the hinged masts referred to in the original quotation would be unsuitable. I do not accept that any formal or

express advice was given by Mr. McGinn in relation to either matter. However, I do accept that in supplying the masts in the circumstances and having regard to the information supplied to them at the time the first-named defendants were representing that the goods supplied possessed the capacities and characteristics referred to in the tender and communicated to Mr. McGinn. Similarly, I accept that in a similar but not identical fashion the secondly-named defendants impliedly advised the first-named defendants as to the capacity of the goods supplied. That this is so seems to me to be confirmed by the original quotation dated the 29th November, 1982 in which the hinged column is described as being one "which can carry five Philips HNF002 floodlights". With regard to the negotiations in respect to the masts which were in fact supplied the telex already quoted in describing the masts and cross arms as being such as "to carry five X floodlights 95 kgs windage 1.72m²" is again, to my mind, a clear representation or advice as to the capacity of the goods in question.

The plaintiff's case is that the advice or representation which emanated in the first instance from Petitjean was erroneous and given or made negligently. Whilst the evidence tendered on behalf of the plaintiff was far-reaching in certain respects the essence of the plaintiff's case is to be found in the statement made by Mr. McLoughlin, an engineer called on behalf of the plaintiff, in which he stated that the maximum wind speed in gusts measured in metres per second at a height of 10 metres above ground level in the east of Ireland and likely to be encountered at 50 year intervals was 46 metres per second. He then referred to a catalogue or brochure prepared by Petitjean and CIE (the French parent company of the secondly-named defendants) and in particular to page 39 thereof and showed that the various masts or columns manufactured by the

secondly-named defendants were graded in relation to the wind conditions which they were likely to encounter. As appears from page 39 aforesaid a wind speed of 46 metres per second (or 165km/h) would fall between wind conditions 2 and 3 and that accordingly the appropriate column would be wind condition 3. Turning then to page 57 which deals in particular with the B O type mast he explained that a 15 metre mast of that description falling within wind condition 3 would carry a weight of 100kg but only with a windage of $.56m^2$ or alternatively a weight of 50kg with a windage of $.62m^2$. In addition he drew attention to the fact that even at Wind Condition One a 15 metre mast could take only a windage of 1.70 with a weight of 50kg which is of course considerably less than that envisaged in the present case. The wind speed figure used by Mr. McLoughlin was taken from the draft building regulations published by the Department of the Environment and proposed to be made by the Minister for the Environment. These continue to be "draft" regulations and do not have any legal force. Some witnesses on behalf of the defendant attached considerable importance to that fact. In my view it is wholly irrelevant. The only significance of the regulations is the figure which it gives for wind speeds and they are - as might be expected - based on information provided by the meteorological service. It follows that, the value of the report turns upon the records and research of the meteorological office and not any legal sanction attaching to the regulations themselves.

That wind speed must be a factor in the stability of high-rise structures, including in particular poles, masts or columns of any description, is self evident. On the other hand, the impact of wind forces; the method by which they are measured and the strength or stability required of the objects which will encounter them clearly involve a very high degree of engineering skills. It is,

therefore, perhaps surprising that at no time did Mr. Featherstone, Mr. Hall, Mr. McGinn or any of the engineers of the secondly-named defendants make any enquiries as to the likely wind speeds in the Leinster area. One of the matters canvassed in the course of the case was the question on whom the duty would properly fall of making such enquiries. Mr. McLoughlin explained that ordinarily it was the client's architect who assumed the total responsibility for the project and retained such experts as might be necessary to deal with any areas requiring specialist attention. He exculpated Mr. Featherstone on the grounds that as an electrical engineer he would not have had the appropriate expertise to advise in relation to structural matters. In fact it appears from the drawings prepared in relation to the tender documents that a firm of Mallagh Luce and Partners were retained as architects/engineers but no evidence was tendered as to the role (if any) which they had in regard to this aspect of the matter. Mr. Hall explained that electrical contractors relied on the expertise of the manufacturer, supplier and Mr. McGinn in effect said that he was an agent or conduit for the supply of the goods and did not have nor would he be expected to exercise expertise in relation to wind speeds. On behalf of the secondly-named defendants it was urged that they could not be expected to know, nor have the facilities of ascertaining what the wind speeds were in a particular part of Ireland. Furthermore, it was pointed out that they did not know the identity of the particular client nor the location of the project. That that was so was underscored by the fact that the telex to which attention has already been drawn expressly states that petitjean did not have sight of the specification.

The relevant information with regard to wind conditions is that accumulated over a long period of years. Accordingly it could not be obtained from any inspection of the site and indeed could

only originate from some long established meteorological service. However, it is clearly a body of information which would be readily available and indeed one might have assumed that there was some international compilation recording the relevant data from different parts of the world. Whoever had the duty or function of extracting the information and from whatever source it could or should have been obtained, there seems to be no doubt that the standards used by Petitjean themselves requires this information. The investigation of mast weight and windage without reference to the appropriate wind condition is of little or no value in applying the standard provided by the Petitjean catalogue because that information is analysed there by reference to coordinates consisting of the mast height and the wind condition. Accordingly, ignorance of the wind condition would be as fatal as lack of information as to the mast height. It seems surprising, therefore, that the officials of Petitjean to whom the enquiries were addressed did not seek to establish from the first-named defendants or from any other source the wind conditions at the relevant site. In fact Mr. Terris, an Executive with Petitjean, gave evidence to the effect that his Company's staff were instructed to enquire, among other things, as to the site of any proposed mast and in relation to the wind speed to be encountered there.

The position then is that no information was in fact provided as to wind speeds or wind conditions by any of the parties seeking the masts or columns and no such information was sought by or otherwise available to Petitjean and the only information available as at the date of trial was to the effect that wind speeds in the general location might be as high as 46 metres per second which would put the project within Wind Condition 3 in the Petitjean scale.

In substance, the answer provided by Petitjean is that they did not apply the scales or procedures envisaged by their own

catalogue at all. Instead they relied upon and applied a British Standard 1840/1960 for steel columns for street lighting. What these defendants say is that in the absence of any express instructions or detailed information that it was reasonable for them to apply the appropriate British Standard which it is said was standard 1840. Again these defendants gave evidence to the effect that this was the standard used by local authorities and public services in Ireland. Certain specifications were put in evidence some relating to local authorities in this country and others with regard to places as far away as Quwait and Maritius. These all contained reference to B.S. 1840. It is, however, proper to add that one undated specification drafted by the Electricity Supply Board referred to British Standard 5649. In addition, however, it may be noted that the Quwait specification in addition to referring to the British Standard expressly provided that the light poles should be capable of withstanding wind speeds of 110kph with gusts of 135kph so that it would appear that the draftsman of that specification felt that it was more prudent to give detailed information with regard to wind conditions in addition to specifying a particular British Standard.

The British Standard 1840/1960 - to which reference is made contains in table 3 thereof figures in relation to "distributed wind loads". The uncontradicted evidence of Mr. Tennyson, a civil engineer called on behalf of the secondly-named defendants, was to the effect that the appropriate figure from that table in the present case was the 61kg/m^2 relating to columns and bracket arms of octagonal cross section. Again Mr. Tennyson gave evidence that this wind loading could be converted into wind speed using the formula set out at page 39 of the Petitjean catalogue. The wind loading is in fact equivalent to a figure of 112kph. Thus it

would appear that the British Standard is considerably less rigorous than that assumed or provided for in the Petitjean catalogue. In addition to the reduced wind loading assumed in the British Standard evidence was given that the windage of floodlights generally, and in particular the Philips floodlights used in the present case, could be reduced by the tilting or angling of the lamps. Whilst this was a matter of controversy between the engineers in as much as it was suggested that one would have to assume that the wind might come from any angle (not only on the horizontal plain but also on the vertical plain) so that one could not safely assume that there was any angle at which the floodlights would necessarily escape the full impact of the wind. To this argument Mr. Tennyson replied that whilst the floodlights might, irrespective of their angle or tilt, meet the full impact of the wind that the resulting force imposed upon the column or standard would depend upon the manner in which the force was resolved and this could be and was affected by the tilting or angling of the lights. At any rate Mr. Hutchinson, another engineer called on behalf of the secondly-named defendants, gave evidence to the effect that having examined the masts in question after the accident that he was satisfied that the masts complied with British Standard 1840. His evidence in that regard was not seriously challenged. Rather the challenge related to whether that was an appropriate standard to apply in the circumstances.

It was clear from the evidence that B.S. 1840 has been under review for a number of years and that very considerable progress has been made in preparing a new and improved standard. Mr. Reilly, a Senior Executive of the secondly-named defendants, who is a member of the Committee preparing the new standard, gave evidence to the effect that much of the new work has been completed and was due to come into effect but that the introduction of various parts

of the new standard were dependent upon the completion of others which are still outstanding. However, it does not seem to me that the fact that the 1840 standard is being revised or is due for revision, or indeed that it may have been replaced, is of crucial importance in the present case. It has not been suggested that the 1840 standard was seriously defective. The evidence, as I understand it, was that it was due for a general revision and improvement. There was no evidence to suggest that the 1840 standard was based on some misconception or possessed any serious inherent flaw.

It seems to me that I must accept, that the masts supplied by Petitjean complied with British Standard 1840 and that in effect they advised that this was an appropriate standard. It seems to me that the onus would then lie on the plaintiffs of establishing that this standard was inappropriate and that its adoption was the cause of the accident. This raises the fundamental question as to why the masts collapsed.

No evidence was tendered on behalf of any of the parties as to the wind conditions which existed on the night of the accident. Whilst counsel on behalf of Petitjean put it to several witnesses called on behalf of the other parties that there was a meteorological station in the Rathfarnham area, none of the witnesses to whom the question was put, appear to have made enquiries from that or any other station of the meteorological service and, as I say, all of the parties refrained from producing an appropriate officer of the meteorological service who might have given detailed evidence as to the wind conditions not only on the night in question but during the period between the time when the masts were erected and the date on which they collapsed. Indeed the parties refrained from offering evidence in general as opposed to scientific terms as to the wind conditions on the 12/13th January

1984 in the Rathfarnham area. In the circumstances I think it may be safely assumed that the parties saw tactical disadvantages to their clients in having such evidence explored. It is understandable that the plaintiffs would contend that the appropriate inference is that the masts were so defective or unsuitable that even unexceptional wind forces could cause their collapse. However, when it is accepted, as I have accepted, that the masts did in fact comply with an established standard, the question of how the accident occurred is not answered so readily.

On behalf of Petitjean it was pointed that in erecting the masts the plaintiffs had departed from the plans drawn by Mr. Featherstone. Instead of laying the flange of the mast directly on the concrete foundation the plaintiffs left a gap between the flange and the concrete to facilitate the introduction of the electric cable from the control box. Mr. Hutchinson, the engineer called on behalf of Petitjean, did not quarrel with that variation. Indeed it is an alternative recognised by those defendants and as such might comply with the note annexed to the Featherstone drawing which requires that "fixing details and foundation details to conform to manufacturers specification". Mr. Hutchinson, however, contended that the slotted holes in the 6 millimetre plate which was immediately below the base plate were too wide and did not provide an adequate bearing area. Even greater emphasis was placed upon the absence of locking nuts and washers. Mr. Hutchinson contended that the absence of such nuts or washers could result in vibration in the columns which could materially affect their stability. In addition he, Mr. Hutchinson, contended that grouting should have been used in the area between the flange plate and the concrete base. It was his conclusion that the installation was totally unacceptable and that the manner in which it was carried out

could have caused the collapse of the masts. At its very lowest this evidence offered an alternative explanation for the collapse of the masts and the evidence given on behalf of the plaintiffs and the contentions made on their behalf must be considered in the light of this alternative. Were the masts unsuitable and defective or were they incorrectly erected? The onus lies on the plaintiff to satisfy the Court on the balance of probabilities that the equipment was defective or unsuitable - with the consequence that the first-named defendants were guilty of breach of contract and the second guilty of negligence. It seems to me that whilst the plaintiffs have made out a case that the goods supplied do not appear to fall within the standards - apparently French national standards - referred to in the Petitjean catalogue, the goods did comply with a recognised standard used by reputable authorities in this country.

In these circumstances it seems to me that on the available evidence the Court could not be satisfied on the balance of probabilities that there was some inherent defect in the masts or something unsuitable about their use in the particular project. It follows that the plaintiff's claim must be dismissed against both defendants.

F.D.M.

9/8/85