



THE HIGH COURT

[2025] IEHC 330

Record No.: 2018/3928P

RAYMOND BYRNE AND LORNA MOORHEAD

PLAINTIFFS

- AND -

ABO ENERGY IRELAND LIMITED, ABO ENERGY O&M IRELAND LIMITED

AND

WEXWIND LIMITED

DEFENDANTS

JUDGMENT of Mr. Justice Oisín Quinn delivered on the 5th day of June 2025

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I. Introduction

1. The defendants' wind farm causes, by means of noise, a substantial interference with the plaintiffs' day to day enjoyment and use of their home and garden in Wexford.
2. Midway during this six week trial (which ran from 25 February 2025 to 4 April 2025) the three defendants admitted liability for nuisance and partially abated the problem by switching off the relevant turbines at nighttime from 10pm to 7am.
3. At the end of the case the defendants apologised for the nuisance, and they proposed that in addition, they would switch off the turbines during the morning from 7am to 11am at weekends and on public holidays but would continue the nuisance into the future during the remaining periods of the day and they proposed paying damages for this future ongoing nuisance, together with damages for the nuisance to date, in part relying on the fact that the turbines contribute to Ireland's renewable energy needs. The defendants also made a proposal to address the plaintiffs' complaint about sporadic shadow flicker from the turbines.
4. Consequently, there are two main issues in this judgment. The first concerns the approach to the assessment of the damages for the nuisance to date and whether, as the defendants contend, this should be measured by reference to a notional capital damage to the value of the plaintiffs' property, or, as the plaintiffs contend, this should be assessed by reference to broader principles relating to the assessment of general damages focussing on the impact to each of the plaintiffs in their use and enjoyment of their home.
5. The second main issue is whether the noise nuisance should be fully abated by means of an order restraining the operation of the relevant turbines at all times or whether the defendants should be allowed pay damages for committing an ongoing nuisance into the future, that they agree substantially interferes with the plaintiffs' normal use and enjoyment of their home, in circumstances where the activity causing the unlawful interference contributes to Ireland's efforts to meet its renewable energy targets as part of the State's national Climate Change Plan.
6. In addition to the foregoing, the issues of whether to award aggravated and exemplary damages arise, together with a subsidiary question as to whether, even if the court were to order a full shutdown of the turbines, there remains a damage to the capital value of the plaintiffs' property by virtue of what the plaintiffs' expert valuer described as a stigma damage.

II. Summary of Conclusions

7. The detailed decision, and supporting reasons, on each issue are set out from para.s 303 to 399 in Section XI below. For convenience, this Section contains a summary of the conclusions reached. In regard to the first issue, I am satisfied that the plaintiffs' contentions are broadly correct. The defendants, having admitted liability for nuisance, asked the court to assess damages based on a notional capital damage to the plaintiffs' home to date, which the defendants' valuer estimated at up to approximately €150,000; the plaintiffs' valuer estimated the notional capital damage at about €394,000. For reasons described more fully later in this judgment, had I been required to evaluate this competing evidence, I would have favoured a figure closer to the plaintiffs' valuer on this issue. However, to measure the damages for the nuisance to date by reference to a notional drop in the capital value of the plaintiffs' property attaches too much significance to the capital value of the person's home in cases of this nature. As it happens, in this case the plaintiffs have a valuable home, but the true *value* of a person's home in the context of the enjoyment they get from its ordinary use and amenity, as a place of refuge, rest and relaxation, cannot necessarily be measured fairly by reference to its capital value. It is more likely to do justice in individual cases to consider and assess the effect, duration and impact on the amenity of the home from a nuisance, which causes no physical damage and is stopped, by reference to an assessment of the impact on an objectively reasonable person in the circumstances of the plaintiff. The defendants' approach, albeit well supported by English caselaw, has the risk of leading to vastly different awards that would not in general appropriately reflect the underlying constitutional rights protected by the tort of nuisance.
8. The law of nuisance, interpreted this way, is sufficient to vindicate and protect the underlying constitutional rights engaged in a case like this. However it would be unjust and potentially discriminatory if persons who endure a nuisance to their home life, such as that caused by ongoing excessive noise (which causes no physical damage to their property and is ended by order of the court), could be awarded wholly different amounts of compensation for the same type of interference primarily by reference to the capital value of their property.
9. The accepted expert evidence in this case indicated that the nuisance was "one of the worst cases of wind farm noise impact" (*per* the plaintiffs' expert, which was admitted by the defendants) and "an outlier" (*per* the defendants' expert). Consequently, for the reasons more fully set out hereunder, and having regard to the particular nature and effect of the nuisance on each plaintiff, I have decided to award general damages to each plaintiff as follows:- to the first named plaintiff €10,000 for each year of the nuisance; and to the second named plaintiff €15,000 for each year of the nuisance. As the admitted nuisance commenced in May 2013, this amounts to twelve years, bringing the award of general damages for the effect of the nuisance to date in respect of each plaintiff to €120,000 and €180,000

respectively. These awards will be made as against all three defendants jointly and severally.

10. As for the second issue, in general a defendant should not be able to pay damages to be allowed to continue to commit a nuisance that remains substantial and will continue for many years.
11. In this case the fact that the defendants' activity contributes to Ireland's renewable energy is highly significant. Ireland's Climate Action Plan requires the State to substantially increase the amount of energy generated from renewable sources, of which wind is the major one. The importance of the goal of the Climate Action Plan is the very environmental future and sustainability of the planet.
12. While the proportion of energy generated by the turbines in question constitutes a tiny percentage of the renewable energy supplied to Ireland's grid, that fact alone is not sufficient to preclude a serious consideration of whether or not the full injunction sought by the plaintiffs should be granted. Inevitably, in any individual case, the likely contribution to the grid of the wind turbines in any nuisance action will be small.
13. The evidence provided by the expert witnesses demonstrated that a multitude of different solutions short of a full shutdown are usually possible to sufficiently abate a problem of excessive noise from wind turbines (it is not an unusual problem) without having to shutdown the turbines completely.
14. At the Case Management Conference two weeks prior to this trial on 12 February 2025, the court pointed out to the defendants that they had no proposed evidence in their witness statements or expert reports which put forward any solution to abate or reduce the noise in the event that the court were to find a nuisance.
15. The defendants very belatedly appeared to contemplate that they might be unsuccessful in defending the nuisance claim. Early in the trial the defendants did then apply and were given liberty to deliver additional evidence (on foot of which they submitted an additional witness statement as to fact and an additional expert report). Nonetheless, the defendants' expert confirmed during the trial that, based on the evidence before the court, the only order that would stop the nuisance would be to order the turbines to be switched off.

16. Wind turbine noise is a recognised problem from wind farms. Addressing it in a substantial way is seen, according to the expert evidence in this trial, as critical to the future success of wind as a major source of renewable energy. The evidence adduced at this trial indicates that engineers, acoustic experts and turbine manufacturers are used to engaging with nearby residents and regulatory authorities to assess and address genuine problems. There are usually many solutions available, short of shutting down the turbines.
17. For reasons that are not entirely clear, the defendants in this case chose not to engage in any meaningful way with the genuine and substantive complaints made by the plaintiffs (which were fully conceded during the trial by the defendants). Even when they were facing having to defend a substantial High Court action they chose not to explore or develop any evidential basis for making a proper submission as to what meaningful steps might be taken to substantially reduce the nuisance or mitigate the problem. Even when Nordex, the manufacturer of the turbines, offered to the defendants to help develop a "mitigation plan" back in 2019, when the defendants were facing an Enforcement Notice from Wexford County Council, they took no action. If an evidential basis for a solution or combination of solutions had been put forward then this could have readily resulted in an order that would not have involved directing the full shutdown of the three turbines.
18. In this case, for the reasons more fully set out below, I have decided that the fair, just and appropriate outcome is to make a permanent order directing that the three turbines in question be shut off completely. That is the only order based on the evidence, in the opinion of both sides' experts, which will prevent the nuisance which the defendants admit is a serious one.
19. The option of allowing the defendants to essentially pay damages to be allowed continue the nuisance during the daytime and evenings is not appropriate in this case - notwithstanding the hugely important public interest in maintaining and increasing the supply of renewable energy to our grid - principally on the grounds that the defendants have failed to put forward any proper evidential basis for mitigation measures that might have made some meaningful impact on the noise nuisance problem and would have allowed the machines to continue to operate, notwithstanding the factual and expert evidence that this could have been done.
20. This conclusion therefore is limited to the circumstances here and including the defendants' decision to largely ignore and then to fail to engage in any meaningful way with a substantial and serious problem which they have belatedly admitted.

21. As to the question of whether aggravated and exemplary damages should be awarded, for the reasons more fully set out hereunder, I am of the view that aggravated damages are appropriate but not exemplary damages. The response and approach of the defendants for the period of twelve years prior to the trial was seriously unimpressive. They did not substantially engage with the plaintiffs' complaints and declined, without explanation, to provide requested information or properly co-operate with the legitimate investigations of the local authority. The approach of the defendants significantly aggravated and prolonged the upset, disturbance and distress experienced by the plaintiffs, and for the reasons more fully described in this judgment, I have decided to award them the additional sums of €24,000.00 and €36,000.00 respectively in aggravated damages.
22. While the defendants failed to offer much answer to the plaintiffs' claim for exemplary damages and while I am concerned at the largely unexplained failure of the defendants to properly engage with the plaintiffs' complaints at a time when the wind farm was generating substantial revenues (over €1m per year for the last four years), I am not sufficiently satisfied that this behaviour has been shown to be so bad or so clearly a conscious and deliberate violation of the plaintiffs' rights as to merit the sanction of an award of exemplary damages. While this conclusion was a relatively close run decision, it is partly informed by my consideration that when the outcome of the case is looked at in the round, I am of the view that the order for the permanent shutdown of the three machines combined with the award of compensatory damages (based in part on the duration of the nuisance) and aggravated damages is probably sufficient in this case to indicate that a failure to properly engage with substantial and bona fide complaints is to be deprecated. In addition, I have taken account of the positive manner in which the defendants behaved during the trial, including making an admission of liability in respect of the nuisance on Day 11, initiating a partial shutdown of the machines at nighttime on Day 12, and making an apology to the plaintiffs at the end of the hearing.
23. Finally, in circumstances where the court is making an order for the permanent shutdown of the machines in question, I am not persuaded, for the reasons more fully set out hereunder, to award any damages for the contended stigma impact on the plaintiffs' property. There is a planning permission for a wind farm. The three other turbines are allowed to continue to operate. The award of damages is designed to properly compensate the plaintiffs for the duration and effect of the nuisance to date. The court's order for the full shutdown of the three relevant turbines means there will be no ongoing nuisance into the future from these turbines pursuant to the current planning permission. Accordingly I do not propose to award any sum of damages other than in respect of the awards described above in respect of the general damages for the effect of the nuisance to date and for aggravated damages.

III. Background

(a) The plaintiffs

24. In Wexford, about three and half kilometers to the northeast of Bunclody, there is a large hill called Gibbet Hill, which rises to about 315m in height. Just to the west of this hill is an area called Curragh. The hill slopes steeply down to Curragh and is partly covered by a coniferous forest owned by Coillte. In 1998 Raymond Byrne and Lorna Moorehead purchased a one-acre plot of land in Curragh with a view to building their family home.

25. Both Mr. Byrne and Ms. Moorhead had strong connections to the area. Ms. Moorehead's parents are from Bunclody, while Mr. Byrne's parents lived not too far away in Fearn's where he had grown up. The family home was built by 1999, and the plaintiffs have lived there ever since raising their two sons and building a life in the local area. They had the benefit of being near their respective parents, who in turn were able to enjoy being near their grandchildren, the plaintiffs' sons.

26. The family home is reached by a narrow laneway from the nearby main road which runs to Bunclody. It is located in a very rural area and has a generous and well laid out garden. Ms. Moorhead's father helped with laying out the garden. Once the family had settled in Curragh, Ms. Moorhead became very actively involved in the local community. She became a member of both the Parents' Council and the Board of Management of the local primary school and she also joined the board of the Bunclody Community Council. She was soon asked to assume positions of responsibility on those local bodies.

27. Prior to moving to Curragh Ms. Moorhead had worked in Dublin as an international brand manager with a background in market research for a substantial international drinks company.

28. Mr. Byrne had qualified as a barrister in the early 1990s and has since pursued a successful career as a legal academic and a law lecturer. He has written a number of legal textbooks and has held positions with the Law Reform Commission as Director of Research and, from 2016 to 2021, he was the full-time Commissioner at the Law Reform Commission.

(b) The wind farm

29. In 2008 the third named defendant (Wexwind) applied for planning permission for a six-turbine wind farm at Gibbet Hill. The plan was to place four turbines at the high part of the hill overlooking Curragh and a further two turbines a little further to the east, at a second

slightly lower high point of the hill (291 meters high) which was considered to be also well exposed to wind. The turbines were to have a tower or 'hub' height of 80 meters. They would then consist of a three blade Nordex turbine with a blade length of 45 meters, giving a blade diameter of 90 meters. Five of the turbines were to have a rated energy output of 2.5 megawatts (MW) and one would be limited to 2.3MW giving a total combined output of 14.8 MW which was necessary to comply to the overall Grid Connection Capacity.

30. As part of the application, an Environment Impact Statement (EIS) was submitted. The EIS contained a predicted noise assessment which estimated the predicted noise likely to emanate from the wind turbines in downwind conditions when the wind was blowing at 10meters per second at 10 meters hub height. At Curragh, the predicted noise contribution of the turbines was estimated to be 39db(A) (decibels A-weighted, i.e. the recognized adjusted decibel measurement to more accurately correlate to the perceived noise level).
31. As it happens the plaintiffs were unaware of the application and apparently there were no objections lodged by any member of the public. On 16 November 2009 Wexford County Council granted permission for the wind farm for a period of 20 years from the date of commissioning of the facility (unless permission for a further period is granted). The permission required that within the first year of operation a report on actual noise levels and shadow flicker experienced in nearby homes would be prepared and submitted and if "abnormal results" were identified by reference to the EIS then the developer was to submit proposals to reduce these impacts by means of "mitigation measures" and/or "limiting the use of the turbines at sensitive periods".
32. Construction of the wind farm did not begin until 2012, and the facility become operational in May 2013. The facility consists of six turbines which connect to a local substation. The entire facility is designed to be unmanned, and the turbines largely operate automatically based on preprogrammed software which controls typically the directional positioning of the blades, the rotor speed, the blade pitch etc., or they are otherwise typically controlled by Nordex technicians from a Nordex engineering control room in Germany or occasionally an engineer on site using a laptop or other device.

(c) The defendants

33. The first and second named defendants (together ABO Energy Ireland) admit to being the operators of the wind farm. The ABO Energy Ireland companies are subsidiaries of ABO Energy GmbH & Co KGaA, (ABO Energy Germany) a company based in Germany. Another ABO company, ABO Energy O&M GmbH through a contractual agreement with Wexwind was said to provide certain technical and commercial management services to Wexwind in

relation to the Gibbet Hill wind farm. ABO Energy Ireland then provides some of these services to Wexwind.

34. Wexwind is a special purpose vehicle which was set up to own the Gibbet Hill wind farm. It has one shareholder, a Luxembourg based investment fund called UniInstitutional Infrastrukter SICAV-SIF (the Luxembourg Fund).
35. The defendants called only one witness as to fact, a Mr. Spicer who is a director and employee of the second named defendant. He described his role as coordinating the activities of the various contractors to the wind farm and looking after "invoice handling". He works from an office in Cornelscourt in Dublin. He never met with or ever had any direct interactions with either plaintiff.
36. Mr. Spicer said he took his instructions from representatives of the asset managers of the Luxembourg Fund called Union Investments property Infrastructure GmbH. These representatives are based in Germany. ABO Energy Germany, Mr. Spicer explained, was still majority owned by the two persons who he described as the "founders", namely a Jochen Ahn and Matthias Bockholt. He explained that in general they build and develop wind farms and then "sell them on to investors after that". The accounts of Wexwind indicate that in recent years it has been paying down financing with payments of more than €1million per year from the income it is receiving for the energy supplied by the Gibbet Hill wind farm.

(d) General features of wind turbine noise (WTN) in a noise nuisance claim

37. Wind turbine noise (WTN) (along with shadow flicker, considered below) is one of two common and well recognised challenges with wind farms. Independent expert evidence was given on behalf of the plaintiffs about WTN and shadow flicker from an environmental health and acoustics expert, a wind energy engineer and an engineer with specialist expertise in acoustics from wind farms. The defendants called an independent acoustics expert.
38. In the context of the admitted nuisance in this case there are a number of features to noise that can typically be relevant to the degree to which WTN may constitute a nuisance. There was no substantial disagreement as between the experts with expertise in relation to WTN in that regard.

(i) Loudness

39. The first significant feature is how loud the noise is. This is measured in decibels which are typically A weighted (dB(A)) to give a more accurate correlation between the amount of energy represented by the sound, and how it is perceived by the human ear.

(ii) *Pitch or Frequency*

40. The next feature of importance is the pitch or frequency of the sound. This is measured in Hertz (Hz). WTN from the rotation of the blades of a wind turbine is typically emitted at a mid to high frequency range (500-800 Hz). However, depending on the machine in question and in particular depending on the manufacturing tolerances or operating efficiency of the gearbox, a wind turbine can also emit low frequency noise. It is now generally recognised that low frequency noise, typically in this scenario between 160 and 200 Hz, is significantly more intrusive to the human ear than mid to high frequency noise.

(iii) *Amplitude Modulation*

41. The third feature of WTN is whether or not the noise is modulating. This modulation, or changeability, can relate to the loudness and the frequency. Amplitude modulation (AM) is a recognized intrusive feature of WTN. This is typically caused by the movement of the blades through the air which can create a swishing or swooshing sound.

(iv) *Different noises simultaneously emitting from the same sound source*

42. The fourth feature of WTN that can affect the perceived intrusiveness of the sound energy emitted from a wind farm is whether or not there is an overlapping of different noises simultaneously from the same source. For example, a wind turbine can emit noise from the passing of the blades through the air which may be a mid to high frequency noise, meanwhile the gearbox contained in the nacelle of the same machine can emit a low frequency noise. In addition, depending on the positioning of various different turbines within a wind farm and the nature of the local topography (ground conditions, trees, different elevations etc.) the different towers can emit different noises depending on their position *vis. a vis.* the direction of the wind. The blades can be turning at slightly different speeds and the modulation and loudness may be different adding to the intrusiveness of the overall noise reaching the human ear.

(v) *Changeability*

43. The fifth feature that may be relevant is whether or not there are changes to the above features. The changes can arise in loudness due to rotator speed changing (due to changing wind speed or operating limits contained in the programming of the turbine) or to the frequency or pitch of the sound or indeed to the modulation changing. This can give the

sound a quality that indicates the machine noise is 'speeding up' or 'slowing down' or 'getting louder'. The experts indicated that this draws the attention of the listener.

(vi) *Erratic or unpredictable changes*

44. Sixthly, there may be an unpredictability or erratic nature or random fluctuation to the changes or sounds. This can be intrusive because the ear and attention of the human listener is drawn to uncertain or unpredictable noises.

(vii) *Tonal noise*

45. The seventh feature is whether or not the noise emitted has a tonal quality. This, according to the experts, is where the noise energy is largely contained within 1/3 of an octave. It is recognized, according to the experts, in the science and studies around intrusiveness of noise from wind turbines that a tonal feature to the noise can be particularly intrusive.

(viii) *Duration of the noise*

46. An eighth feature is the duration of the noise and whether there are gaps and breaks. In other words, an intrusive noise that only occurs for a very short period of time and only rarely or sporadically, can have a considerably smaller effect in terms of disturbing people who live nearby compared to a noise that continues for a longer and considerable period of time, for example for long periods throughout the day or night.

(ix) *The timing of the noise*

47. A ninth feature that can have an impact on the level of intrusion is the timing during the day of the noise. In that regard nighttime or times perceived as being associated with rest or relaxation such as the evening or at weekends are typically seen as more sensitive times when, for example, people in their own home or garden can have an expectation of peace and quiet or rest and relaxation. In addition, the timing can be relevant insofar as there may be more or less other noises or sounds which may mask or reduce the intrusiveness of the noise from the wind turbines.

(x) *Wider context*

48. Then a tenth factor is the wider context in which the WTN is experienced. This means that any consideration of the effect of the WTN should take account of whether the environment is typically rural and peaceful or urban, and if urban whether it is a quiet residential area or a residential area close to busy roads or other noisy activities can be relevant.

49. Included in a consideration of the wider context is a feature which one expert described as “messaging”. This feature can involve the listener as experiencing more intrusion or irritation from noise when they know of and can see the source of the noise and can associate the noise with the context in which it is occurring.
50. In addition, this wider context can involve consideration of the character of the noise and whether it is natural or industrial or man-made. In that regard many natural sounds such as from rain, thunder, wind, birdsong, animals or water sources are typically recognised as being considerably less intrusive than the sounds from industrial or man-made sources.
51. In relation to the sixth feature described above, namely whether or not the changes are unpredictable or erratic or, on the other hand steady or rhythmic, this feature can be affected by local meteorological conditions and the topography of the site. While it is usual, according to the experts, that WTN as a problem is more typically associated with a person living downwind from a wind farm, both acoustics experts for each side in this case agreed that the plaintiffs in this case were experiencing an unusual feature of *upwind* amplitude modulation from this wind farm.
52. In this case the experts agreed that the amplitude modulation which is commonly described in terms of a “swish” or “whoomp” or a “thump” or a “whoosh” was occurring across a range of wind directions and was commonly both upwind and downwind. In that regard both the plaintiffs and defendants’ experts agreed that “this case is unlike many others where it is normally limited most of the time to downwind conditions” (i.e. the amplitude modulation) and that, because of this unusual feature, this had a relevance and impact on the frequency and duration of the impact of the noise nuisance that was admitted.
- (xi) *Sensitisation and attenuation*
53. Finally, the experts alluded to a number of features that can occur when a person is exposed to a noise nuisance over a prolonged period of time. The first feature is sensitisation. In this scenario a person who is regularly exposed to a particularly irritating noise becomes - and it is commonly acknowledged that this can occur - sensitised to the noise. In other words they are more attuned to noticing the noise and finding it irritating. This is, as it were, in contradistinction to habituation, where the person may get used to a noise that is regular, steady and predictable.

54. The other concept relevant to considering the impact and amount of interference being caused by noise is the concept of attenuation. This relates to the impact on the noise of moving from outdoors to an indoor setting (the effect of the noise energy moving through walls or windows). Typically moving indoors will lead to a drop in the energy levels of mid to high frequency noises, which can include the sounds of nature such as birdsong or wind and the rustling of nearby trees and so on. When these sounds reduce due to attenuation, the human ear can then more readily notice a low frequency man-made tonal noise such as can be emitted from wind turbines.
55. As can be readily appreciated from the foregoing therefore, in considering whether or not the sounds emitted from a wind farm can objectively and reasonably be considered to constitute a nuisance, it is clear from the evidence of the experts on both sides in this case that it is not simply a question of assessing the loudness of the noise or, accordingly, therefore the precise distance of the person from the wind farm.

(e) Shadow flicker

56. Shadow flicker is recognised as a potential intrusive feature for nearby residents from a wind farm. Shadow flicker occurs when, depending on the position of the sun *vis a vis* the wind turbines, a rapid flickering of light is experienced by nearby residents.
57. In this case the defendants conceded that shadow flicker was a problem at particular times of the day during particular times of the year for the plaintiffs. This problem is well recognised and given the ease with which it can be predicted it is very easy to ameliorate the effect of shadow flicker without any substantial impact on the energy production generated by the wind farm. In other words, at any given time for the particular periods during the year it is possible for the owner and operator of a wind farm to identify when shadow flicker will be a particular problem and it will only arise at any particular moment from one particular turbine. This problem can be ameliorated by making adjustments to the software that controls the turbines and the defendant agreed to implement such a measure and this was identified and proposed by the defendants towards the end of the case.

IV. THE NATURE OF THE NUISANCE EXPERIENCED BY THE PLAINTIFFS

(a) Introduction

58. The nuisance experienced by the plaintiffs was particularised in some detail in the pleadings delivered on their behalf and was then elaborated upon in the witness statements prepared and delivered on behalf of the plaintiffs. The plaintiffs then gave evidence on Days 2, 3 and 4 of the trial. No objection was made on behalf of the defendants that either of the plaintiffs'

evidence had extended outside the ambit of the pleaded claim. Then on Day 11 all three defendants admitted liability for nuisance in respect of the entirety of the plaintiffs' pleaded claim for nuisance. As a consequence, the plaintiffs dropped their claim that the wind farm was operating in breach of its planning conditions. Accordingly, there is no issue of fact arising in relation to the evidence given by the plaintiffs as to their experience of the nuisance.

59. The plaintiffs explained that they had chosen to build their home and live in a quiet and peaceful rural area to raise their children. They explained that this decision was in part informed by the fact that they had grown up in the area and both of their parents were alive at the time and they wished for their children and their grandparents to enjoy each other's company for as long as possible.
60. Each of the plaintiffs had both enjoyed their own childhoods in nearby Fearn and Bunclody respectively. As a result, their home is extremely precious to them and is naturally full of rich memories of their children growing up, spending time as a family and with their grandparents.
61. The plaintiffs gave evidence how the first turbine became operational in May 2013. The plaintiffs' home is approximately 1,050 meters from the nearest turbine on Gibbet Hill. While the overall experience of each plaintiff was similar, the noise nuisance did affect them in different ways.

(b) *The first plaintiff's experience*

62. Initially in May 2013 the operation seemed to involve the testing of individual turbines but Mr. Byrne gave evidence that almost immediately he found himself disturbed by both the loudness and the nature of the noise from the turbines.
63. He said he realised he was experiencing what the experts acknowledged to be a feature of wind turbine noise namely amplitude modulation (AM). He said that this has been a regular and persistent feature of the wind turbines since 2013 and he described the AM sound as a whoop or whoosh noise and sometimes a thump.
64. However, he also described hearing what he said was a distinctive humming noise. This was the low frequency noise that was identified by the independent experts. He described this noise as an intrusive base tonal sound which was not predictable and was, he felt, competing

in an a-rhythmical fashion with the mid to high frequency noise. He said he found this very disruptive. He said he found the low frequency tonal sound particularly disturbing when he was inside the house and at night. This was supported by the expert evidence in relation to the phenomenon of attenuation described above.

65. He said that during the first few months of the following year he also noticed the shadow flicker problem. He described this as a rapid flickering shadow that falls across the property and comes through into the house. Videos were shown by the plaintiffs during the trial of this phenomenon and it can best be described as having a strobe-like effect which is extremely distracting and intrusive. Mr. Byrne said it was impossible to avoid it. Nonetheless it was of relatively short duration, lasting on average roughly 10 minutes or so and only during particular months of the year.
66. The plaintiffs gave evidence that as a result of the efforts they were making to engage with the defendant and then due to subsequent requests from the acoustic engineer from the local authority (which was considering and ultimately did serve enforcement notices on the defendants) that they were asked to keep noise diaries and logs.
67. Mr. Byrne described the area in which their home was built as a very quiet uplands area. There would be occasional noise at harvest time or early morning traffic however he said the local road was a quiet road. He said that since the wind farm became operational the noise environment is now highly intrusive and pervasive. He said it was especially intrusive late in the evening and he described the WTN as a pervasive, invasive and intrusive noise. He described the noise from the blades as being a whooshing or swishing sound but that when the rotor blade speed increases it can become a whoop sound. He said it was particularly difficult to get to sleep.
68. In relation to enjoying the garden outside the house he said that before 2013 he very much enjoyed being out in the garden and doing gardening work but that when the turbines are operating fast it takes the joy out of being outside. He said that when he has to do gardening work, he puts on ear pods and plays a podcast to drown out the intrusive noise, but even with the volume up loud he explained that it does not always drown out the noise from the turbines. In addition to the swish sound or the whoop when the blades are moving faster, he described also hearing a hum or droning noise which he said had the character of a mechanical noise.

69. Mr. Byrne described that when the blades are moving very fast that he could feel a kind of pressure occasionally and that he had to pop his ears.
70. Mr. Byrne explained that his study is in the front of the house where the house faces Gibbet Hill and the turbines. His study is on the ground floor and even when he is in his study with the window closed and the turbines are rotating quickly, he can hear the whoosh and the thump and also the hum sound. He said that the sound can break his concentration and then he will hear the hum sound so that he rarely has the windows open now.
71. In relation to the sleep disturbance, he said that this began at the beginning in May / June 2013. He said initially it was a shock as the noise intruded into the plaintiffs' bedroom. He found it difficult to get to sleep straight away so initially he would listen to the news on the radio to try to help mask the noise. However, he explained that this only sometimes worked. Accordingly, he said he began to work late so that he would go to bed feeling really tired. Usually, he had retired to bed at 11:00pm but due to the noise he had begun to work later and sometimes would not go up to bed until 1:00am so that he might fall asleep due to tiredness.
72. He described how both he and his wife used podcasts with a familiar voice that they had listened to before to try to mask out the noise. As a result, he said he was getting approximately only five hours sleep from approximately 2:00am to 7:00am. He described however that his wife would sometimes wake up during the night and this might wake him up. He described how she would go downstairs to watch news stations on the television at a loud volume.
73. He described how his work practices changed over the years from 2013 due to changes in his working role and then due to the COVID pandemic. Initially from 2013 he was commuting to Dublin and would leave the house shortly after 7am and he would drive up to get the Dart from Greystones. His working day meant he did not get home until after 7:00pm. However, after a number of years he was getting increasingly more tired and began to take the bus from Fearn's so he could sleep on the bus.
74. He had been the Director of Research at the Law Reform Commission and then the full time Commissioner from 2016. He described how his wife was diagnosed with a serious illness in 2017. From the evidence, it was clear that both plaintiffs have busy lives and were significantly and substantially struggling as a result of the effect and intrusion of the noise on their home.

75. Mr. Byrne described that as he became more sensitised to the noise that he was able to discern that the three particular turbines near to the plaintiffs' home were not operating identically. This was confirmed by the independent expert who analyzed the SCADA data made available from the defendants on discovery.
76. Mr. Byrne described the impact when he was out in the garden that he would not be able to have the peace and comfort that he had enjoyed prior to the wind farm operating in 2013. This was something that he had really valued. He said the noise impacted on him when working in his study and particularly at nighttime and he described this. The disturbance to his sleep was something that really started to impact him over time. He described the effect as unrelenting and that there was no escape from it.
77. Based on his evidence, it was clear that one of the features that added to the distress was that Mr. Byrne felt there was essentially no escape from the noise either outside or inside, whether he was trying to work or whether he was trying to read a book or relax. Then in particular there was no escape at nighttime.
78. He described as intrusive the character of the whooping sound which he had come to understand was the phenomenon recognised by the experts as amplitude modulation. He was also aware of the hum which he described as like a kind of low drone.
79. During the course of the hearing the court attended, at the request of and with the agreement of the parties, a sound studio where various samples of the noise emanating from the wind farm as recorded by the plaintiffs' independent expert were played to the court. One of these recordings indicated the tonal droning noise which had a frequency of 160Hz. The noise recording of this sound had been made internally and had a decibel level of 43.2dB.
80. It could be clearly heard that the tonal noise was modulating. In addition, some of the sound samples clearly contained an identifiable swoosh of the blades *and* also a tonal drone that to the courts ear was modulating as well. This observation which was indicated by me during the sound recording was confirmed by the expert. In other words, it was possible to hear both a separate swoosh noise from the blades but also a modulating low tonal drone.

81. Mr. Dietrich Meyer, another independent expert of the plaintiffs (whose evidence is discussed in more detail below), explained that the lower frequency tonal drone noise was in all probability emanating from the gearbox within the nacelle of the wind turbine and that it had a modulating effect because the sound was radiating out through the rotating blades.
82. Mr. Byrne described the whooping sound when the blade speed increases to 15 rotations or more per minute which amounts to 45 blade passes (each turbine has three blades) as creating a whomping sound nearly every second, which he described as being impossible to avoid. He then pointed out that this thumping noise could be competing with the hum. He said it was impossible to try to read on the patio or at times even in the study and his coping mechanisms became news radio and familiar history podcasts. He pointed out however that even while listening to the radio or to a podcast with the headphones on, that it was still possible to detect the noise from the wind turbines. These features, and the fact that the plaintiffs found the noise intrusive in this manner, was confirmed by the independent experts as objectively likely based on the known effects of these types of sounds and based on the experts' independent sound recordings.
83. He also pointed out that the noise was not predictable and that it was erratic and could change not only from one day to the next but during the day. As a result, he found it very difficult to concentrate, to relax, to read or to get to sleep.
84. He described being able to detect both the whomping sound and the hum in between the whoops of the blades and that this was like listening to a "terrible competition".
85. He indicated that it was not the visual impact of the turbines or simply the loudness that was disturbing, but it was rather the strange character of the noise and the erratic and unpredictable nature of it.
86. The plaintiffs described how they had moved a mattress into the back of the house and at one stage tried moving their bedroom to the back of the house into a smaller room that had been used initially as one of the children's bedrooms when he was a baby and then subsequently as essentially a walk-in wardrobe. However shortly after this they realised that the noise was permeating into this room as well and that this move gave no relief.
87. One of the experts explained how low frequency noise can be more discernible indoors due to the phenomenon of attenuation described above. In other words, there are other masking mid to higher frequency noises from nature that can be heard outside but these noises are

less intrusive and are lost indoors, leaving the ear only to detect the mechanical low frequency tonal noise. After a few months accordingly, the plaintiffs moved back to their bedroom at the front of the house.

88. As Mr. Byrne explained to the court on Day 3 (page 33 line 7) *"judge this is our home, we want to stay in our home, we have for 11 years asked ABO and Wexwind please allow us to stay in our home, please stop this AM and hum in our house, please come and talk to us please listen to what we're listening to, we want to stay here and we think you can do something about that. We want to stay here."*

89. Mr. Byrne explained how a home is far more than simply a capital asset. On Day 3, page 34, he explained how their home carried with it both joyful and painful memories associated with the life he and the second named plaintiff had shared there. He explained that:-

"these are all things that are part of that home that is not just bricks and mortar it is full of memories it is full of strength it is full of all those things that are indescribable in any other terms than being all about life. Life is about those joyful times those terrible times but that's I think some of the things that give us the greatest resilience as human beings the strength as human beings to say please to ABO and Wexwind, please come to our home experience what we experience. We will tell you all about the joy, we will tell you why it is so important, we will bring you around, we will show you all of the things that we put into this in terms of all of the wonderful things that are, there's structure but also these memories that we want to hold on to and will you please come and talk to us at some point."

90. Mr. Byrne explained that he has been largely working from home since he retired from the Law Reform Commission in 2021 and therefore his study in the house is also his workplace.

91. Mr. Byrne explained that towards the end of 2017 the plaintiffs were worn down and that was when they had to make a decision to hand the matter over to their legal team and then in 2018 the litigation commenced.

(c) The second plaintiff's experience

92. Ms. Moorhead experienced similar noise intrusion to that described by her husband. She noticed and was aware of the tonality or hum noise and the amplitude modulation and she described the low frequency noise being occasionally felt as a vibration or pressure. She also found the unpredictable and changing nature of the noise as intrusive and that despite using coping mechanisms she was unable to acclimatise to the noise.

93. She explained that by the summer of 2017 she was unwell having been diagnosed with a serious illness which required treatment but exposed her to experience increased fatigue and tiredness. At this time on occasion, she felt an overwhelming sense of despair when she was trying to rest at home. It was clear from her evidence that she found the failure of the defendants to meaningfully engage in a significant way aggravated her feelings of helplessness, frustration and caused her additional aggravation and upset.
94. Overall, she described the noise from the wind turbines as one that can pervade the house, is intrusive and disturbing, and on occasion can be associated with vibration. She explained that in her experience the AM varies in terms of loudness and can occur on its own or occasionally is associated with the tone and low frequency noise which fades in and out.
95. She explained that the modulating tone is constantly ramping up and down in volume and therefore repeatedly catches her attention. She explained that on many nights she had to get up and goes downstairs and watch the television at a loud volume. She described the tonal noise as if someone is standing in the corner of the bedroom striking a tuning fork with varying force so that the resonance is constantly changing and fluctuating.
96. In 2004 the second plaintiff had been diagnosed with vestibular migraine and suffers occasional bouts of vertigo. She explained that the prolonged impact of the wind turbine noise on her sleep was unhelpful to these conditions.
97. She explained that she also used to get great enjoyment from gardening and reading outdoors but that at certain times with the noise from the relevant turbines she is only able to spend time outdoors with on-ear headphones. She also described how the noise outdoors has impacted on the family's use of the garden for social occasions.
98. She expressed the view that she was perplexed at the failure of the defendants to properly engage with the complaints and she pointed out that the first time anyone was sent on behalf of the defendants to conduct a noise monitoring exercise was in August and September 2024 in preparation for the court hearing.
99. Ms. Moorhead's evidence clearly conveyed her awareness of the intrusion of the fluctuating hum and the rise and fall in volume and the fact that the noise fades in and out and in

addition she indicated she was aware of and her attention was drawn to the tone within the hum. This description was backed up by the independent acoustics expert evidence.

100. In terms of watching television she explained that normally the television is set to volume 15, whereas when she goes down during the night and turns on CNN or Sky News she puts the volume up to 50 to try to mask out the noise from the wind turbines.

101. At times the second plaintiff became visibly upset during the giving of her evidence. She conveyed that she had endeavoured to remain calm and to constantly carry on but she explained that the wind turbine noise was tapping into her reserves and her resilience.

(d) Site visit on 4 March 2025

102. By agreement between and at the request of the parties, I visited the plaintiffs' home on 4 March 2025 (the parties were represented, and the stenographer made a transcript of the visit). On the day of my visit there was a mild light breeze coming from the south. Outside the house a clear but gentle 'whoosh' of the blades could be heard, the blades were turning at about 18 rotations per minute. There was also a low rumble to be heard. Initially, to the unsensitised ear, it sounded as if an aircraft might be flying overhead. To my ear, the noise on the day was moderately intrusive. Ms. Moorhead in evidence subsequent to the site visit said that she would have rated the conditions as a '1' in terms of her noise logs (10 being the most severe). Having said that, this was based on the conditions just before I arrived and it was indicated by Counsel that the wind had increased somewhat during the visit (this observation was based on a counting of the turbine blade rotations per minute).

(e) Overall impression of the plaintiffs' evidence

103. The first plaintiff was cross examined for two hours on Day 3. Nothing of substance was put in terms of contradictory evidence. It was not suggested he was oversensitive or being unreasonable. It was not suggested that his recollections or diary entries were inconsistent with any of the data collected by the experts.

104. He was measured and reliable. He described highly intrusive whoomp, AM and droning/tonal hum which interferes with sleep and interfere with the normal use and enjoyment of the home, especially at times that would be associated with rest (the evenings, nighttime and the weekends). The level of disruption is substantially in excess of what an ordinary reasonable person should have to endure. It effects his sleep, work, rest and enjoyment of his home.

105. He described moving bedrooms, waking in the night, going to bed extremely late so as to be tired, wearing headphones, being unable to enjoy his garden, listening to talk radio and podcasts at night to try to drown out/minimise the noise. He described it as intrusive and attention grabbing. His evidence was supported by the emails and correspondence, by the data recorded by the acousticians and by contemporaneous diary entries.
106. The second plaintiff gave clear and cogent evidence. She is a person clearly very well regarded in her local community and is involved in lots of community groups. She is clearly well respected and trusted by her neighbours and peers. Her evidence was supported by diaries and logs. While these were snapshots they indicate a clear pattern of highly intrusive WTN. The tonal hum and the whoomp clearly intrude and disrupt rest and relaxing time, gardening, evening time and sleep. Her sleep has been substantially and regularly disturbed.
107. Based on her evidence it is clear that the shadow flicker is also highly intrusive. It is like an alien form of light pulse. Watched on a screen (as it was shown to the court) it resembles the screen pulsing or flickering as if resetting. In the natural environment it is clearly highly visually intrusive.
108. The plaintiffs' evidence was clear and coherent and was supported by their logs and noise diaries. These Diaries indicated for example instances where the plaintiffs' children and their friends no longer wanted to play outside in the garden because of the turbine noise.
109. In addition, the particular features of the noise described by the plaintiffs were supported by the independent experts who made sound measurements. Furthermore, certain sound recordings were played to the court and these supported the descriptions given of the noise intrusion by the plaintiffs.
110. The cross examination of the plaintiffs was careful and appropriate and it was not suggested at any stage that the plaintiffs' descriptions of the noise were inconsistent with any of the independent or objective data or recordings or notes or records.

(f) *The Plaintiffs' accounts were supported by the independent experts*

111. The plaintiffs obtained reports from independent experts which supported their case in objective terms.

112. It should be observed at this stage that when both plaintiffs gave their evidence and referred to their logs and the diaries that these demonstrated firstly a consistency with the independent measurements taken by the acoustics experts but also indicated that the plaintiffs were able to identify levels of noise that on occasion they did not consider intrusive and these attracted low scores in the ratings system they have been asked to adopt by the County Council.

(i) *Mr. Stigwood*

113. Mr. Stigwood's evidence, commenced on Day 6 and was helpful to the plaintiffs' case in relation to establishing nuisance. He reviewed Ms. Large's first report and then he was taken to his own reports. In reviewing Ms. Large's first report he explained the various findings which showed the following combination of features:-

- i. as part of the noise emanating from the wind turbines firstly there is amplitude modulation namely a rising and falling of the loudness at a medium 500 Hz frequency;
- ii. this is caused by the movement of the rotor blades of the turbines through the wind;
- iii. this is typical AM noise from wind turbines and is accepted by the defendants' expert as occurring in this case;
- iv. however, in addition there is also a low hum noise that is also modulating;
- v. this tonal or droning noise is at approximately 160 Hertz frequency;
- vi. this low frequency tonal noise is also modulating;
- vii. Mr. Stigwood explained that this may be due to the fact that it is emanating from the motor or hub contained within the nacelle and is then radiating out through the rotor blades – this explanation was endorsed as the likely cause of the modulating low frequency tone by Mr. Meyer;
- viii. as a result, there are two modulating frequencies: one at approximately 160 Hz and a second one at 500 Hz;
- ix. in addition, the changing noises emanating from the wind turbines is affected by the fact that there are three turbines and depending on the wind and the precise alignment of the rotors which are adjusted mechanically to face the wind and allowing for the fact that the wind can be moving in different directions and at different speeds in different positions due to the topography of the site (this surprising account was confirmed by the defendants' SCADA data from the turbines), then on occasion the noise data recorded by Ms. Large and as analysed and explained by Mr. Stigwood appears to contain overlapping noises where the peaks

and troughs are accentuated by virtue of the fact that the sound wave is arriving simultaneously thereby accentuating the peak and the trough;

- x. this is occurring at both the low and the medium frequency, but then on occasion the waves can detach or desynchronize which gives the effect to the listener that the pulsing noise or the modulating noise is speeding up but in effect what is happening is that the peaks and troughs from the two or three different wind turbines are arriving at slightly separate times;
 - xi. they can then re synchronize again depending on the conditions;
 - xii. as a result of all of the foregoing when there is amplitude modulation which can occur in particular in either upwind or downward conditions, and unusually here it can occur in upwind conditions, the noise level - the decibel level - and the modulation can change and fluctuate and these changes and fluctuations draw the attention of the listener.
114. Mr. Stigwood explained that low frequency noise is considered more intrusive. He referred to the UK Defra NANR guidelines which place a limit for modulating indoor noise at the 160 Hertz frequency and he explained based on Ms. Large's data how this has been exceeded in several of the monitoring samples by a considerable degree. In particular he referred to one data set which showed that on one occasion the amount of noise at the 160 Hertz frequency which was modulating indoors was at approximately 43dB (the limit is 34dB). He said this would be a considerable and substantial amount above the Defra limit which is considered to be the limit of what is tolerable.
115. He also explained that the WHO guideline of 42dB as the threshold for nighttime noise which would cause disturbance from traffic or cause somebody to awaken was also breached.
116. On Day 7 Mr. Stigwood gave specific descriptions of data recordings which confirmed or supported the accounts given by the plaintiffs of the noise intrusion from the wind turbine noise.
117. His analysis of the data indicated that the wind turbine noise has a significant AM feature. This AM fluctuates in terms of the peaks and troughs and also fluctuates in terms of how quickly the modulations occur.
118. He explained that his data also indicated that low frequency noise in the one third octave around 160Hz is a significant component of this wind turbine noise. This is heard by the

human ear as a tonal noise. He confirmed that when the low frequency noise was isolated, the data indicated that the low frequency noise itself is modulating.

119. He explained on Day 7 how low frequency noise can be more intrusive indoors because while the noise passing through walls or windows, or open windows, reduces but in particular the higher frequency noise reduces - this makes the low frequency component which remains more noticeable and intrusive.
120. He stated that the SCADA data, when analysed indicated quite dramatically the different wind conditions at each of the three turbines which face towards the plaintiff's home. This analysis demonstrated the unpredictable and turbulent nature of the wind conditions on the top of Gibbet Hill from the perspective of the plaintiffs' home.
121. He explained that in most wind conditions there was some level of noise intrusion and that accordingly there was little or no respite to be had, save when there was essentially no wind blowing.
122. Mr. Stigwood also referred to the various planning standards and statutory nuisance standards that have been adopted and / or are developing in the United Kingdom. These indicated, in his opinion, that over time there has been an increasing awareness and acceptance that amplitude modulation and low frequency noise are particularly intrusive. There are recommendations for noise penalties where wind turbine noise contains substantial amplitude modulation and more recently a recommendation that where the amplitude modulation increases in frequency that this would also lead to a corresponding increase in the noise penalty. The practical effect of an increase in noise penalty is to add the decibel penalty to the existing overall loudness which can push the loudness over a limit in the planning condition, this means that an operator will have to reduce the operation of the turbine to reduce the overall decibel level (sound energy) being produced by the turbines. These types of arrangements are far more specific than the basic decibel level limit contained in the 2009 permission for this wind farm. In addition, however, this evidence was referred to by Mr. Stigwood to demonstrate the growing acceptance of the unacceptable intrusiveness of both AM and low frequency noise.
123. Mr. Stigwood explained that in the context of a nuisance assessment one should look at a multiplicity of factors from the perspective of the neighbour who claims that their home is being unreasonably intruded by wind turbine noise.

124. In his opinion, this case he said was extreme and one of the worst cases of wind turbine noise he had come across for a number of reasons. Firstly, there is a high component of low frequency noise. Secondly, the low frequency noise component is itself modulating. Thirdly the low frequency noise is intrusive and is very noticeable indoors and is above the Defra NANR45 recommended threshold for low frequency noise of 160Hz, which is at 34dB on the reference curve.
125. He regularly measured low frequency noise at the 160 Hertz frequency indoors that was substantially above this threshold and he explained that this would be intolerable; would be intrusive to sleep; and would be disruptive and cause interference and he said the likely effect of this type of noise correlated with the accounts of the intrusion given by the plaintiffs.
126. This case was unusual and exceptional he said and one of the worst he had ever come across. He explained that the standards are a touchstone of what is objectively considered intrusive and they indicate that amplitude modulation and low frequency noise above the threshold and increased speed of modulation are all features that are reasonably to be considered more intrusive (see his evidence on Day 7 from 15:00 onwards).
127. In summary the evidence gathered by Mr. Stigwood and his colleague Ms. Large demonstrated that there was amplitude modulation from the wind farm which was measured inside the plaintiffs' home which exceeded the low frequency criteria for unacceptable noise. In addition, this noise was exacerbated in its intrusiveness by virtue of the fact that it was highly modulating. In addition, the measurements indicate that the noise exhibits a tonal droning beat. The measurements referred to in evidence by Mr. Stigwood showed fluctuations well in excess of 10dB and sometimes of the order of 15dB. This is a highly noticeable level of modulation. According to Mr. Stigwood he recorded average levels of low frequency noise well above the 34dB limit recommended by the guidelines. He recorded average levels of low frequency noise in or around 160Hz, with a tonal quality where the noise is within 1/3 of an octave, and with decibel values in the order of 38dB to 41dB. He described these as exceedances which are substantial. In his opinion these noise levels would produce considerable disturbance especially when recipients are exposed over a long period of time. He said the distinct droning or tonal character measured on a second-by-second basis adds notably to the intrusiveness.
128. His conclusions were sent out in his report in relation to this issue in paragraphs 4.25 to 4.28 as follows:-
- "4.25 In my experience such high levels of exceedance of the NANR45 criteria are consistent with unreasonable intrusion and exceed any point of acceptability*

by a substantial margin. This is where the noise intrusion is absent of cumulative impact from other elements of disturbance from the source of noise. In other words where the low frequency content occurs on its own. These other impacts include the turbine amplitude modulation noise within mid and high frequencies, tonal / droning modulations and the general rumbling sound generated. These additional elements exacerbate noise that is appropriately judged highly unreasonable due to the low frequency constituents in isolation.

4.26 *Unfortunately the nature and character of low frequency noise disturbance and human reaction to it is not sufficiently understood to evaluate cumulative impacts from a range of noises and how one type exacerbates another. What is reasonably concluded is the combined impact means unreasonable intrusion occurs with lower sound energy levels and less frequency in the number of periods of disturbance.*

4.27 *In this case exceedance of low frequency noise criteria is sufficient to conclude this element is unreasonable, exceptional and intolerable to the normal reasonable person in isolation of the other characteristics. Its measurement and observations of occurrence are consistent with the resident's complaints of it.*

4.28 *The DEFRA Report on wind farm noise nuisance NANR277 specifically references the NANR45 criterion curve and states: "Should local authorities consider that low frequency noise is a substantial element of any complaint, they may wish to consider incorporating the advice of the Salford University Contract NANR45 procedure for the assessment of low frequency noise into their investigation."*

129. At paragraph 7.41 Mr. Stigwood states:-

"7.41 *This combination of unreasonable and intrusive constituents to the noise renders it one of the worst wind farm noise intrusion experiences I have observed in my career in a neighboring house. The LHS inset graph in Figure 24 shows a point in time where the fluctuating low frequency tone / drone exceeds the adjacent bands by 15-18dB which means the character is all the more intrusive than the average value indicates."*

130. At paragraph 10.8 Mr. Stigwood states:-

"10.8 *My independent analysis and the objective observations during 2024 confirms what I consider to be overwhelming evidence of unreasonable noise intrusion in this case. The complaints are strongly supported and normal*

limits of tolerance by people are exceeded by a significant margin. In general in my career I am struggling to recall wind farm noise impact worse than experienced in this case. In some cases there are higher peaks or average sound energy levels experienced but the low frequency content and tonal / droning seriously exacerbate the already intrusive impact in this case."

131. At paragraph 10.12 Mr. Stigwood states:-

"10.12 In my expert opinion and experience the objective evidence is consistent with the residents' complaints. The noise is unreasonable and exceptional especially comparatively with other environmental and industrial sources. It exceeds normal boundaries of acceptability and expected intrusion by a substantial margin. This is one of the worst cases of wind farm noise impact that I have witnessed in my career, not due to the decibel levels but the cumulative intrusive factors of low frequency noise, tonal / droning content, amplitude modulation and occurrence over a wide range of wind directions."

(ii) Mr. McKeown

132. As will be described later in more detail, Wexford County Council served an enforcement notice and commenced an enforcement process against the defendants. These enforcement notices were based on the investigations and findings of a Mr. Eugene McKeown of RPS, who were independent experts retained by the Council.

133. Mr. McKeown was called as an independent witness by the plaintiffs on Day 14. His evidence is also discussed below in the context of the approach that he said the defendants were taking to the problem (of which he was critical). Mr. McKeown is a member of the Institute of Acoustics and a member of the Acoustical Society of America and he has a master's degree in applied acoustics. He is also a chartered engineer and a fellow of the Institute of Engineers of Ireland. At the time he was giving evidence in this trial he was working in Galway University doing research funded by the Environmental Protection Agency looking at noise from offshore wind farms and studying the effects on the soundscape of offshore wind farms and coastal sites. He explained that in the early years of the wind farm industry in the 1990s amplitude modulation was not seen as an issue because the turbines were smaller at that point in time. He explained that it was critical for the industry to have and maintain public support to ensure the ability of the industry to roll out and install wind energy.

134. In the context of the substance of the plaintiffs' complaints, he said his data supported their concerns. Mr. McKeown's evidence during the early part of Day 14 indicated that his measurements demonstrated considerable substantial low frequency noise with a prominent tonal quality and significant low frequency noise in the 165 Hertz region. His evidence also confirmed that his recordings indicated that 75% of the time they were recording significant levels of amplitude modulation. He said on Day 14 at page 61 line 19 that the:-

"outstanding feature from my perspective is the amplitude modulation and I felt that the amplitude modulation was such that that was the important issue. The total penalties, we had detected some, we had detected some at high levels. I had, you know, listened to tones when I was down there under attended measurements. But in terms of Wexford County Council, for the want of a better term, pursuing the wind farm for non-compliance, tonal noise on the basis of our measurements, wouldn't have presented a strong case, whereas amplitude modulation did. But I just qualify that by referring to what I said previously, that we were measuring externally and in those circumstances masking noise is likely to be higher -- if the tonal level is here, the masking level is likely to be here, whereas if you filter it as in you're inside a structure or building, it is likely to be lower and the tones more prominent"

135. Mr. McKeown also gave evidence by referring to his field notes which showed amplitude modulation, plus humming, and he confirmed tonal noise with amplitude modulation and overall, he confirmed the plaintiffs' description of tonal noise, low frequency noise and amplitude modulation.
136. Mr. McKeown confirmed that even with the three relevant turbines turned off there might still be some noise from the 4th turbine T4 but he offered the view that the level of noise from this turbine would not in his opinion constitute a nuisance. There is no application in these proceedings (and nor would there be a basis for same) to restrict the operation of this fourth turbine, or indeed the two other turbines further to the east.
137. In Mr. McKeown's report he called this 4th turbine T5 (he had a different numbering system for the turbines). Mr. McKeown also confirmed the plaintiffs' account about low frequency noise. He explained that with low frequency noise, which he had measured outdoors, that if you step indoors what happens is a lot of the masking noise is reduced so low frequency tones become more prominent and amplitude modulation becomes much more prominent.

(iii) Mr. Meyer

138. Mr. Meyer is a mechanical engineer and an automotive engineer who had spent 35 years working in the renewable energy industry mainly with wind turbines in Germany. He worked as a partner in a company that manufactured wind turbines for seven years and headed various project development companies as managing director. He also worked in research on the reduction of wind turbine noise by sound decoupling, variable rotor speed operation and airfoil optimization. He was involved in that research beginning in the early 1990s. In addition, he worked for a German manufacturer before becoming a manufacturer himself and was involved in developing wind turbines in Germany. His experience has involved him in the development of approximately one hundred and fifty wind farm projects across the world including eight in Ireland. Mr. Meyer's evidence both corroborated and explained the science behind what the plaintiffs described on the one hand, and also outlined the variety of potential causes of and solutions to the problems identified, on the other. In this part of the judgment, I summarise those portions of his evidence that tended to corroborate and explain what the plaintiffs had described. Later, this judgment will return to his evidence on the potential to mitigate the noise from wind turbines without having to turn them off as this becomes relevant to the issue around what kind of injunction to grant.
139. Firstly, it is useful to quickly set out some of the factual context for his evidence. The plaintiffs' house is largely due west of the wind farm. As the prevailing wind is from the west, the plaintiffs' house is quite often upwind of the wind farm. Nonetheless for reasons that were explained by the expert evidence on both sides, unusually the plaintiffs in this case were experiencing considerable noise intrusion even when upwind of the turbines. In that regard the EIS and the approach to the planning assessment was based simply on a downwind analysis and the only condition placed on the operation in terms of noise was a simple decibel level. As explained above, the experts in this case agreed that unlike many other cases the amplitude modulation here was being experienced in both upwind and downwind conditions.
140. As Mr. Meyer explained, the software controlling the turbines takes readings from a wind gauge and adjusts the position of the turbines and the blades automatically through motors so that they face into the wind. This is to maximize energy production. In other words when the wind is coming from the west and the plaintiffs' house is accordingly upwind of the turbine, the turbines and the blades turn to face towards the plaintiffs' home.
141. Mr. Meyer explained how the local topography may be contributing to this unusual effect where amplitude modulation is heard in these upwind conditions. He described how he had visited the plaintiffs' site in March 2022. He explained that the three turbines in question T6 was 1127 meters from the plaintiffs' home, T3 was 1050 meters and T5 was 1288 meters. He explained that on visiting the site he was struck by the fact that the turbines were visible

and the sound emitted by the turbines hits the plaintiffs' house without a natural barrier. He said that when he first saw the turbines, he was about two kilometers away in his car. He stopped and got out of his car and that even from this position the operating noise of the wind turbines was clearly audible. He then said that arriving at the house the operating noise was louder than on the approach even though the wind flow was from the southwest and the rotors were not facing the house on the day of his visit. He said he could hear the low frequency noise and the low frequency noise that was audible was in his opinion generated from the gearbox and showed a strong tonality.

142. The wind coming from the west travels on the down slope as it passes the plaintiffs' house, but then as it enters the valley this lower wind or air is pushed upwards by the steep facing slope of Gibbet Hill. This air then passes through a forest on this facing slope of Gibbet Hill which adds to the turbulent nature of this air, which then, as it arrives at the three facing turbines, mixes with the air travelling at the height of the turbines thus creating a potentially turbulent set of air conditions which in turn can affect each of the three wind turbines facing the plaintiffs homes slightly differently and causing additional noise problems.
143. Mr. Meyer explained that when he was at the plaintiffs' home, he described how turbine T6 stopped but he said that the noise from turbine T3 was still clearly audible. He explained that when the house is upwind from the turbines the wind has to climb the hill which leads to an acceleration of the wind flow in the layers close to the ground and that in addition the wind has to flow over a forest which causes turbulence. He explained in his evidence on Day 15 at 12:08 that the mixture of the two results in a very unsteady air flow to the wind turbine rotors and thus creates high aerodynamic and mechanical loads. He said that in such a situation the rotor blades cause more noise due to oblique flow and turbulence and the gearboxes, which in his opinion generated a strong single tone, radiate this tone via the rotor to which they are mechanically connected. He explained that this can create a modulating effect for the low frequency noise, which is in addition to the modulating effect of the noise from the blades themselves.
144. As to the impact of the amplitude modulation being a change of loudness of the same tone, he described this as being:-

"the problem that makes people crazy, because if you listen to a tone which always has the same sound and the same volume, you ignore it after a while. Now, if that changes constantly, you go mad. And like if the sound is transferred from gearbox into the blades and there is - say the wind is changing, there is more or less load on the turbine, then you have a change in the - not in the frequency, but in the power, yeah, that - in the power with which the sound is emitted. And the rotor is an ideal vehicle to propagate it"; see Day 15, pages 102-103.

(iv) Mr. Corr

145. Next, and somewhat unusually perhaps, the substantial nature of the plaintiffs' experience was reflected in the manner in which one of the defendants' experts altered his view as to the level of the impact of the noise nuisance on the capital value of their home. Mr. Corr, a valuer, was called by the defendants to offer an expert opinion on the question of the impact of the nuisance on the capital value of the plaintiffs' home.
146. Leaving aside for the moment the question as to what weight to attach to his evidence in that regard (it will be considered later), Mr. Corr's evidence was nonetheless stark and instructive in relation, at least in one respect, to how extreme this wind turbine noise nuisance is.
147. Mr. Corr gave evidence on Day 18. He explained in his evidence that he had initially formed the view in his expert report that the wind turbine noise would have an impact of only 1% on the capital value of the plaintiffs' home. He felt the total impact of the wind farm on the capital value of the plaintiffs' home was 4%, comprising 2% for the visual impact (about which complaint is not made) and then 1% for the shadow flicker and a further 1% only in respect of the noise.
148. Mr. Corr explained how he had initially been sent a huge amount of documents by the solicitors for the defendants who were instructing him to prepare his report. On Day 18 page 94 he very candidly conceded: *"to be honest with you I didn't actually read them because I thought there was a possibility that the case might settle and that effectively I'd have read potentially hundreds of pages that in a settlement scenario might not be relevant."*
149. He then explained that prior to giving his evidence he had been sent the plaintiffs witness statements and the transcripts from Days 2, 3 and 4 when the plaintiffs gave evidence, together with some transcripts from Mr. Stigwood, the plaintiffs primary acoustics expert. He then candidly explained that having read *this* material his view had completely changed. Having reviewed this material, he felt that the case was an outlier and that his estimate of the potential impact of the noise nuisance on the value of the plaintiffs' home had increased massively, potentially up to seventeen times, so that now he was of the opinion that the impact of the noise from wind farm on the capital value of the plaintiffs' home was up to 20%, with 17% (17 times more than his original assessment) being due to the effect of the noise.

150. In real terms this meant that his pretrial view (which was, on his own admission, made without really reading the papers) was that the impact of the noise on the value of the plaintiffs' home should be worth about €8,440.00 (this was based in part on studies that he felt showed that over time the impact of a nearby wind farm on the capital value of a property *decreases*) and now, having read their witness statements and transcripts of their evidence and that of their expert, it had jumped to €143,480.00 (or €151,920.00 including the 1% damage for the shadow flicker).
151. He agreed in cross-examination that the plaintiffs' house is dramatically affected by wind turbine noise intrusion and he reiterated that essentially the position was so bad in his revised opinion to make it an outlier. It is to be noted that this was the reaction of an independent person briefed to offer an opinion on behalf of the defendants.
- (v) *Mr. Carr*
152. Mr. Shane Carr of Irwin Carr was retained as the defendants' acoustics expert in 2017 and he gave evidence on Day 17. However, he had worked with ABO prior to that on other sites. Prior to the commencement of the trial, he had prepared six reports between 2018 and 2025, although he only ever first engaged in any substantial analysis of the noise at the plaintiffs' home during August and September 2024. During the trial the defendants were giving liberty to deliver an additional report of Mr. Carr dated 7 March 2025. This report was also prepared prior to the admission of liability.
153. In addition to those seven reports, Mr. Carr prepared a joint statement (the "Acousticians' Joint Statement") with Mr. Stigwood in late February 2025, shortly before the commencement of the trial. This joint statement was prepared following the Case Management Conference of the 12 February 2025 when the Court had directed the parties to arrange for a joint report from the acousticians.
154. In his first five reports prepared 2018 and 2019 there was no substantive engagement with the plaintiffs' complaints. Rather Mr. Carr's approach was largely focused on the planning permission issues and the Enforcement Notices that had been served by the Council. In his sixth report of 16 January 2025, Mr. Carr continued to focus on the question of compliance with the planning permission and, in addition, he made technical criticisms of the approach of the plaintiffs' experts. In his seventh report of 7 March 2025, he explained that any mitigation of the noise, short of turning off the turbines, would involve a significant period of trial and error, possibly a year or more. However, none of his suggestions were put to the plaintiffs' experts and no submission on behalf of the defendants was made relying on any of the suggestions mooted by Mr. Carr, other than turning off the machines.

155. Following the admission of liability for nuisance and the consequential abandonment of the plaintiffs' application for a planning injunction, Mr. Carr's role in the case become more limited. Even though the defendants admitted liability in respect of the noise nuisance, including in relation to the low frequency tonal noise, Mr. Carr's January 2025 report did not identify low frequency noise as a problem. Mr. Carr offered no explanation for his failure to identify the substantial problems experienced by the plaintiffs consistently for many years. Nor did he explain why he failed to hear, record, or measure the noise nuisance being experienced at the plaintiffs' home that had been heard, recorded and verified by Mr. Stigwood and his colleague Ms. Large, by Mr. McKeown of RPS (after he was retained by the Council) and then by Mr. Meyer. If this failure troubled him, it was clear he had not dwelled on it.
156. In the Acousticians Joint Statement, Mr. Carr had stated that the IEC TS 61400 Standard (a standard published by the International Electrotechnical Commission in relation to wind turbines) stated that it was "impossible to accurately measure low frequency noise from wind farms". This statement was not agreed to by Mr. Stigwood. During cross-examination, Mr. Carr accepted that this was an incorrect description of the relevant standard. Mr. Carr went on to say that in his opinion based on the guidance, that the appropriate way to measure for low frequency noise indoors, was not to actually measure it indoors at the location, but rather it should be estimated using predicted levels of LFN based of the manufacturer's trials of the same type of turbines in Scotland and Denmark. Despite the fact that the wording of the Institute of Acousticians standard which he referred to applies to the necessarily predictive exercise required at a planning stage when a Noise Impact Assessment (NIA) is required (NIAs are required during the planning process in the UK, i.e. *before* the facility is built), Mr. Carr explained that he had spoken to one of his colleagues who sat on a body along with the chairperson of the energy body in the Institute of Acousticians, and he understood that this person shared his view as to what he thought the standard meant. In this case the uncontradicted expert evidence was that low frequency tonal noise problems can be caused due to problems in the gearbox (a view that is consistent with the communications to the defendants from Nordex in 2019 referred to below in Section VI). Consequently, the opinion of Mr. Carr that complaints of low frequency noise from these particular turbines in Wexford should be assessed by relying on predicted low frequency noise levels based on tests by the manufacturer carried out in wind farms in Denmark and Scotland was unconvincing irrespective of his interpretation of the standard.
157. While Mr. Carr did not assist the court with an understanding of the extent or causes or potential methods of ameliorating the admitted low frequency noise, he did indicate, in his evidence and through the Acousticians Joint Statement delivered just before the trial began, that he agreed with Mr. Stigwood that amplitude modulation was occurring in this case under

a range of wind directions “commonly both upwind and downwind” and that “this case is unlike any others where it is normally limited most of the time to downwind conditions. This is relevant to the frequency and duration of impact.”

158. Finally, during his evidence on Day 17, Mr. Carr was asked by the Court (page 100, line 13) “what order would the Court have to make to stop the daytime nuisance that the defendant says it is committing?” and Mr. Carr replied “In the evidence that you’ve [been] given, as this is agreed, it would be switching them off” (Day 17, page 100, line 16).

V. INTERACTION BETWEEN THE PLAINTIFFS AND THE DEFENDANTS AND WEXFORD COUNTY COUNCIL

159. Both plaintiffs gave evidence of their efforts to interact with the defendants in the hope that their complaints would be taken seriously and that the defendants would carry out some proper substantive analysis of the problem and engage with them in an effort to mitigate or ameliorate the noise intrusion. Those efforts were unsuccessful.

160. Ms. Moorhead described how after a particularly bad night of noise at the beginning in June 2013, where she found it impossible to sleep, she had sent an email to ABO asking them to take some action to mitigate the noise. She received a response from a Mr. Egan stating that the defendants’ staff had not identified any untypical noise. Mr. Egan's email of the 19 June 2013 also indicated that ABO would be organising an independent noise monitoring program.

161. Ms. Moorhead described how she had written a number of initial letters to the defendants in 2013. However, the defendants did not indicate they would engage in any substantive testing of the wind turbines but rather their initial replies were in general based on an approach that assumed their legal obligations to nearby residents were limited to complying with the conditions of the planning permission. As a result, the plaintiffs then got in touch with Wexford County Council.

162. On 5 July 2013 Wexford County Council informed the plaintiffs that they had opened an enforcement file in respect of the Gibbet Hill wind farm and they asked the plaintiffs to keep a noise diary. The Council’s engineer, Mr. Cooney, carried out some external noise monitoring at the plaintiffs’ home but for reasons that are not clear that data was subsequently lost. Meanwhile a firm called Hayes McKenzie was retained by the defendants. Their instructions appear to have been largely limited to assessing whether or not the defendants were operating the wind farm in accordance with the planning permission. In view of the admission of liability, the proposed witness from Hayes McKenzie was not called

by the defendants. In any event the Hayes McKenzie monitoring did not include attending at the plaintiffs' property and it appears to have been solely limited to addressing the position from the point of view of the planning permission.

163. On 13 February 2014 Wexford County Council wrote to Mr Spicer of ABO and in this letter they indicated that:

"On the recommendation of our Senior Executive Scientist, it is recommended that an investigation should be carried out to ascertain the source of noise and if breach in limits are due to the Wind Farm, that you submit remediation measures to bring the Wind Farm into compliance. The investigation should include a further noise survey, both during and post investigation, to indicate subsequent compliance."

This was accompanied by a formal warning letter from the County Council to ABO.

164. Subsequent to this on 3 November 2014 Mr Cooney sent an email to Mr Egan in the following terms:

"Hi Emmet,

Regarding the Gibbet Hill wind farm, we have been carrying out a noise survey to premises to the south of the wind farm from 11 August to 24 October 2014 [it was not disputed that this was in fact the plaintiffs' premises].

In order to progress our investigation and ascertain the veracity of the complaint that it is the wind farm which the origin of the noise, can you forward the following SCADA details, so that I can cross-reference it to the noise data collected.

Wind speed,

Wind direction

For the wind turbine marked with a yellow square below,

Kind regards,

Brendan Cooney." (sic)

165. Mr. Spicer was involved in this and passed the request on to, amongst others, a René Werner of Union Investment and a Martin Gromus, also of Union Investment, the advisers for the Luxembourg Fund that owns Wexwind. On 7 November 2014 Mr. Spicer wrote:-

"Hi Rene,

Please see below request from the council.

Can you please advise if you would like this data released to them or not.

Regards

Robert"

Later that same day Mr Werner replied as follows:

"Hi Robert

Martin and I decided to not provide any information.

Kind regards

Rene"

This was relayed by Mr Egan to Mr Cooney on 10 November 2014:

"Hi Brendan

We have to ask the owners of the wind farm for permission where requests for data to be released are made; unfortunately they did not agree to it on this occasion.

Regards emmet" (sic)

166. These documents were made available on discovery and despite the specific pleas that the defendants had failed to engage properly with the plaintiffs, the defendants chose not to call any evidence to address this nor did they seek to explain this refusal. During the re-examination of Mr Spicer, an attempt was made to suggest to Mr. Spicer that in fact this request had been responded to positively and he agreed. However, this answer was incorrect and Mr. Spicer was actually referring to an earlier email exchange. There was no evidence that the defendants changed their approach. In addition, it was clear from Mr Spicer's evidence that he was unfamiliar with the documents.
167. There had been various delays in the Council carrying out noise surveys including in one instance where data was lost and secondly when a procurement process had to be carried out. Eventually in 2016 the plaintiffs were told by Wexford County Council that a consultancy firm RPS had been appointed to undertake an assessment. Mr. Eugene McKeown of RPS was the relevant expert and he gave evidence in this case as a witness called by the plaintiffs.
168. Mr. McKeown gave evidence on Day 14 of the trial; his evidence in so far as it corroborated the accounts of the plaintiffs is largely described above. However, he also gave relevant evidence in relation to the issue of the nature of the interaction with the defendants which is relevant to the claims for aggravated and exemplary damages (and will be discussed

further in Section XI(4). Mr. McKeown pointed out that the defendant had not provided him with all the SCADA data; Day 14 page 97. Mr. McKeown's evidence on Day 14 page 100 made it clear that the defendants' level of cooperation was not satisfactory. He explained that short term switch offs which was all that the defendants ever offered was not practical. According to his evidence, in terms of his experience he explained (on Day 14 page 101) that the defendant "had been dragged kicking and screaming to facilitate anything". This was to be contrasted with other wind farms where "things were sorted out with a phone call an e-mail or a cup of coffee". Nothing of substance was put to Mr. McKeown to challenge this and no evidence of any substance was called by the defendants to contradict this.

169. By the time of the trial Mr. McKeown was no longer working for RPS. He explained that his earlier report carried out for RPS was designed to establish whether there was compliance with the planning conditions. On the 26 June 2017 RPS issued a report which concluded that the noise levels at the plaintiffs' house were such as to render the Gibbet Hill wind farm non-compliant with the grant planning permission. This ultimately led on 29 November 2017 to the first Enforcement Notice issuing from the Council regarding non-compliance with the noise limits and requesting the defendants to submit proposals within four weeks to reduce the noise impact.

170. When the formal initiating letter of 6 March 2018 was sent to Wexwind indicating a claim in nuisance, the defendants failed to take this seriously or engage in any substantive way. Indeed without having undertaken any substantive tests in relation to the plaintiffs' claim of nuisance, the defendants' solicitors issued a blanket denial that the wind farm's operations were causing a nuisance. No evidence was adduced by the defendants to justify sending this letter. The only explanation that Mr. Spicer could give for this approach was that the defendants had been focused on the planning issue. On Day 16 page 137 in reply to a question from the Court, Mr. Spicer stated, "*I would agree that ABO and the defendants were very much focused on the planning side of things and did not focus as much on the nuisance aspect*".

171. Mr. McKeown gave evidence of a meeting with representatives of the Council and ABO and he referred to the minutes of the meeting; Trial Book 8A, page 253. ABO were represented at this meeting by Mr. Shane Carr and he took a technical approach by arguing that the matter should only be examined by looking at data in a downwind direction only. This meeting took place on the 22 May 2018 at ABO's offices. Mr. Carr did not want to look at the wider picture but made a technical argument based on the ETSU standard that only downwind measurements should be looked at. At this stage ABO did not, according to the

evidence, have any substantive data of its own in relation to the noise impact from the wind farm on the plaintiffs' home.

172. Mr. McKeown explained that he had followed the correct guidelines when carrying out his assessment of the noise nuisance. He was not challenged about this in cross-examination. Mr. McKeown's detailed analysis as to why Mr. Carr's approach was incorrect both substantively and from a technical point of view was set out in detail in the letter he wrote to Mr. Cooney (the Council engineer) dated the 24 May 2018. The substance of this was not seriously disputed on behalf of the defendants.
173. Ultimately after a significant period of time, during which various technical reports were exchanged, the Council withdrew the first Enforcement Notice and issued a second Enforcement Notice. In addition the Council requested the defendant to investigate the incidence of shadow flicker. That request was made on 25 January 2019. On 28 August 2020 the Council decided that it was no longer proceeding with the Enforcement Notice.
174. Overall, the evidence of Mr. McKeown, together with the correspondence of the defendants and their own internal emails demonstrates that the defendants were not willing to properly cooperate with the Council in its investigation. In addition the evidence demonstrated that the defendants were not interested in carrying out any substantive analysis of the merits of the plaintiffs' complaints. The evidence in this regard indicated a continuing pattern of the defendants to not engage in any substantive way with the complaints being made but to rely on technical and, based on the evidence of Mr. McKeown, frequently incorrect technical arguments that served only to avoid substantive engagement. These findings are relevant to my decision in relation to the plaintiffs' application for aggravated damages.
175. While this was occurring, the defendants had decided to contact Nordex, the manufacturers of the turbines. Those contacts are best understood in the context of a consideration of the expert evidence that related to the actual potential to mitigate the noise nuisance by taking steps that would ameliorate the problem while continuing to facilitate the turbines operating.

VI. THE POTENTIAL TO MITIGATE NOISE NUISANCE FROM WIND FARMS

176. It was notable that in advance of the trial the defendant had not proposed to call any evidence either from a factual witness or an expert as to how the noise from the wind farm might be mitigated or ameliorated.

177. While the defendant was given liberty to and did adduce additional evidence, they were still not in a position to make any proposal to mitigate the noise nuisance other than turning off the machines and the defendants' only expert on this issue, Mr. Carr, accepted that based on the evidence, turning off the machines was the only way to abate the noise nuisance (see above in Section IV).
178. It is important however to note that the expert evidence before the court indicated that there is usually an abundance of solutions short of turning off the wind turbines that can be tested and adopted in cases like this. These solutions typically require a substantial willingness on the part of the wind farm operator to engage wholeheartedly with genuine concerns, to investigate them properly and to then devote some time to testing potential solutions and indeed spending some resources potentially on making adjustments or upgrades to the equipment.
179. In keeping with the overall lack of engagement by the defendants with the issues in the case, the defendants did not retain or adduce any evidence from an engineer, either an engineer employed by the defendants or by Nordex who maintain the machines, or alternatively an independent engineer. The plaintiffs on the other hand called evidence from Mr. Dietrich Meyer. As described earlier in this judgment (in Section IV), he gave evidence corroborating the account of the plaintiffs. He also gave evidence indicating the likely causes of the problems and outlining potential solutions.
180. Mr. Meyer explained how the topography of the site near Gibbet Hill was likely to be contributing to the noise nuisance problem at the plaintiffs' house. He had an illustration in his report which he discussed on Day 15 which demonstrated how the prevailing wind from the west passes over the plaintiffs' house and then briefly down into a valley before rising up the facing slope of Gibbet Hill and passing through and over a forest. This air then impacts with air travelling at the height of the turbines creating a turbulent air flow and he explained that these "flow irregularities" can disturb the flow of air around the rotors thus contributing to the noise being emitted from the wind turbines.
181. He explained that the noise from turbines can come from the rotor blades, the generator, the gearbox, the hydraulic pump, or the yaw brake or the cooling fans; although the latter three sources he said were not relevant in this case. Here, he felt the most likely source of the noise was the blades, the generator and the gearbox. He said the gearbox was most probably the cause of the low frequency noise; see Day 15 from pages 16 onwards to page 21, and in particular page 21 answer 40. He also explained that the topography was likely contributing to the problem; see Day 15, page 25-27.

182. He explained that studies around the world had emphasised the effect of low frequency noise and amplitude modulation. He explained that amplitude modulation, because it contains periodic loudness fluctuations, is a "carrier of information" to the human ear and that therefore the human ear is especially sensitive to this noise characteristic. He said that the science now recognised that low frequency noise had negative effects on human beings. He also indicated that as well as the wind direction and the turbulence factor, that the technical condition of the components of the turbines and the maintenance condition could also be relevant factors.
183. He then gave evidence about the potential for the operator to reduce these problems. He explained that wind turbines have different operational modes and these are used to optimize the performance of the turbine but can also be used to reduce the sound emission. He said in general the rotational speed of the rotor must be reduced as noise emission from the blade tips is amongst the most powerful sources of noise. He explained that the rotator speed can be reduced by either pitching the blades or by increasing the torque. In this latter scenario, by increasing the torque in the generator this will reduce rotator speed but will not reduce power or energy generation.
184. His report however explained that the downside of this operational mode is that the load on the generator and gearbox increases which can result in heat and vibration which is audible by increased humming and a strong single tone. He explained that the manufacturing quality and material quality of the gearbox and the generator would be relevant in this context.
185. As described earlier, Mr. Meyer had described that when he visited the plaintiffs' home, he was struck by the fact that the turbines were visible and the sound emitted by the turbines hits the plaintiffs' house without a natural barrier.
186. He gave evidence as to the turbine manufacturer figures from Nordex (the manufacturer of these turbines) and he said from his impression the tonality at the site was out of range of the manufacturer's figures; see Day 15 at p41-42.
187. He then said "*in my opinion either the gearboxes used in these turbines are of a high tolerance class which means that mechanical tolerances of the gear wheels are at the upper limit, resulting in higher sound emission of the gearbox or the gear boxes are worn out or damaged*"; see Day 15, page 42. This evidence was not challenged by the defendants. As discussed above, see Section IV(f)(v), this evidence (which preceded the evidence of the

defendants' acoustics expert Mr. Carr) undermines the rationality of Mr. Carr's evidence when he stated that the correct way to assess the low frequency noise at the site was not to measure the low frequency noise at the site but rather to use data from the manufacturer's facilities in Scotland and Denmark.

188. Mr. Meyer explained that a number of things can be done to ameliorate these problems. First of all, a full check of the condition of the rotor blades should be carried out to check whether they are damaged, polluted, dirty or requiring some repair. He said, secondly it was important to make sure the blade angles are correctly adjusted so that they will work with the same angle to the wind and then he said changes can be made to the operational speed or to change the load conditions of the system. In general, he said that every manufacturer has their own way to do it depending on the problem but that there were ways to do it and it needs some time to implement these solutions.
189. He explained on Day 15, page 100 that the speed can be reduced by reducing the uplift of the blades, although this will lead to less power being generated and he explained that this could be done with the Nordex machines from the control room and he then explained that the second method was to increase the torque in the generator.
190. Mr. Meyer explained that the proper operation of the gearbox could be assessed by the carrying out of an endoscopy which enables you to look into the gearbox and to look at the gear wheel.
191. Mr. Meyer explained that with a low tolerance gearbox there is very little 'play' (loose movement) between the gear wheel teeth and this reduces noise but is more expensive. The defendant did not engage with this evidence and did not call any engineering evidence to indicate with any precision or detail as to precisely what checks had been carried out and what the outcome of those checks were, or what the tolerance levels were for these machines.
192. While the defendants and their acoustics expert Mr. Carr did not engage with these possibilities during the trial, they were not unknown to the defendants. The documents which the plaintiffs obtained on discovery and introduced in evidence, demonstrated that at the time when the defendants were at risk of prosecution after the service of the Enforcement Notices, they were actually advised by Nordex of a range of possibilities to solve the problems.

193. On 4 March 2019 Mr. Timm Greinig of Union Investment (the corporate advisers to the Luxembourg Fund that owns Wexwind) sent an email to Mr Spicer in relation to the Enforcement Notice asking as follows:

"Hi Robert

Does it make sense to check out technical options for the worst case scenario? I don't know if Nordex offers trailing edge serration retrofits for N90 turbines, but I guess there are at least some alternative operating modes available

Regards,

Timm"

On the 11 March 2019 Mr Spicer sent an email in Nordex as follows:

"Can you provide details of noise optimisation modes available for the turbines in Gibbet Hill.

Can you also advise on possible retrofits to reduce the noise/increase the power output such as trailing edge's serrations?"

On the 11th March 2019 a representative of Nordex sent an email to Mr Spicer in relation to this issue as follows:

"Hi Robert

I should be able to pick up on this for you. I have attached a document outlining the noise power modes available from the N90/2500 Gamma turbines. This should provide some details on what is available.

In terms of retrofits there are no official upgrades which we can offer however we have had success with softer elastomer bearings for tonal noise. If the noise issues seem to be in that area we can provide more details.

Have there been noise studies carried out you may be willing to share? If we have access to results we may be able to assist with a mitigation plan" (underlined for emphasis).

Mr Spicer then sent an email to Mr Greinig on 19 March 2019 in relation to this issue as follows:

"Hi Timm,

As just discussed, see attached latest info from Nordex on various operation modes.

Nordex confirmed that there are no official upgrades (including trailing edge serrations) available however Nordex have had some success with softer elastomer bearings for tonal noise.

Below are the conclusions from the RPS report for tonal noise"

There was then an email from Nordex to Mr Spicer on 19 March 2019 at 13:05 on the subject of noise operating modes which states as follows:

"Hi Robert,

Unfortunately the specification document I have is in German however it is attached for review in case that helps.

Essentially the retrofit exchanges softer elastomer bearing rubber components which assists in deadening the gearbox vibration noise. We have had some success on another site with this retrofit so it may be an option you would like to consider.

One thing to note is that as they are softer components Nordex cannot give a guaranteed operational life of new elastomer bearings. Any replacement required during the turbine life will be at ABO cost. We will need to include visual check at each Type 3 service." (underlined for emphasis).

194. Notably therefore, the evidence demonstrated that there was an indication in these communications from Nordex during 2019, who are the manufacturers of the turbines, of:-
- a willingness to engage in relation to developing a potential "mitigation plan";
 - a clear awareness of the potential issue of "tonal noise" (which was not something that was related to the planning permission or its conditions);
 - an indication that the machines had different "noise power modes available" already on the machines;
 - an indication of retrofits involving softer elastomer bearings with which Nordex had already "had success with" but which would have some costs if replacements were required; and
 - a request for "noise studies carried out".
195. Despite this engagement from Nordex, the defendants decided not to pursue *any* of these options. Nor did they give any explanation for why they did nothing in this regard. Essentially in terms of the evidence nothing happened thereafter.
196. However these interactions and in particular the evidence of Mr Meyer, indicates that there were a range of potential solutions to address the concerns such as those being raised by the plaintiffs. Mr Meyer, in an updated report, indicated that a range of potential mitigation measures were available which would in general require to be evaluated over periods of between six and twelve weeks and then could take potentially up to fifteen months to test.

197. Some of the proposed measures involved dealing with the gearbox, the generator and the rotor blades and could involve potentially making upgrades and adjustments to the machines and some involved potential adjustments to the software operating the machines.
198. The defendants did not indicate any willingness to carry out such a process and the only curtailment option offered by them was the shutting down of the machines during nighttime and in the mornings at weekends, but otherwise operating the machines as they are currently operating and paying damages for this ongoing future nuisance.
199. The significance of this will be discussed further below, in the context of the issue of whether to grant a full injunction or to accede to the defendants' request to allow them to continue with the nuisance and to pay damages for the future impact of the interference caused to the plaintiffs.

VII. THE ISSUES

200. Accordingly, the issues that arise in this case are as follows:
- (1) How much damages should be awarded for the effect of the nuisance from May 2013 to date? Related to this issue, is question as to the *basis* by which the damages should be assessed.
 - (2) Allied to the damages issue, is the claim by the plaintiffs that the defendants' operation of the wind farm amounts to an infringement of their constitutional rights, separate from the claim in nuisance.
 - (3) Should the court grant an injunction to fully restrain the operation of the three relevant turbines or alternatively should the court allow the turbines to operate during the daytime (7am to 10pm) and from 11:00am to 10:00pm on weekends and public holidays, and thereafter award damages to the plaintiffs for the future ongoing nuisance? In this context, the issue arises as to what weight should be given to the public interest in energy generated from wind.
 - (4) Should the court award aggravated damages for the manner in which the defendants engaged with the plaintiffs' complaints and the claim?

- (5) Should the court award punitive/exemplary damages on the basis of the plaintiffs' claim that the defendants deliberately declined to engage with their complaints while continuing to generate substantial revenues from the wind farm?

VIII. THE PLAINTIFFS SUBMISSIONS

201. I propose to outline a summary of the main submissions on behalf of the plaintiffs on these five issues.

(1) *The assessment of damages for nuisance to date*

201. In relation to the assessment of damages, the plaintiffs submit that they should each be awarded general damages for the period of the nuisance from May 2013 to date. It was submitted that the amount of damages must be meaningful and should reflect the almost totally continuous nature of the ongoing nuisance and the substantial effect it had on the plaintiffs enjoyment of the property, in particular by reference to the nature of the intrusion, the sense of being intruded upon, the lack of sleep, the stress and the anxiety.
202. It was submitted that this was a claim relating to the plaintiffs' property rights. Reference was made to the interference with the ability of the plaintiffs to work in their home and to enjoy their home and to enjoy their garden.
203. The essential principle was submitted to be that of *restitutio in integrum*.
204. The plaintiffs referred to *Patterson v Murphy* [1978] ILRM 85, *Hanrahan v Merck Sharpe & Dohme* [1988] ILRM 629 and to *Webster and Rollo v. Meenacloghspar (Wind) Ltd* [2024] IEHC 136 (*Webster (No.1)*). In *Patterson*, Costello J. states at p99 in the context of a noise nuisance case that general damages are payable to each of the plaintiffs separately for annoyance, discomfort, inconvenience and mental distress. This is also referred to be Egan J. in *Webster (No.1)* at para.s 643 and 644 who refers to the fact that general damages were payable to each plaintiff separately for the nuisance in *Patterson*.
205. Counsel for the plaintiff submitted that the law of nuisance was grounded in the protection of property and that accordingly it would not be appropriate to take account of or to make any comparison with the guidelines issued in relation to personal injuries cases.

206. It was submitted that the injury in this case was injury to the quiet and peaceful enjoyment of the plaintiffs' property. In addition the nuisance, even if fully enjoined now, had, according to one of the plaintiffs' experts, caused a permanent "stigma" damage to the capital value of the plaintiffs' property that should be compensated for.

(2) The constitutional claims pursuant to Articles 40.3 and 40.5

207. It was submitted that the plaintiffs' property rights under Articles 40.3 and 40.5 of the Constitution had been violated.

208. Reference was made to the interference with the use of the plaintiffs' home and garden. In summary it was submitted that the operation of the wind farm constituted a violation of the dwelling of the plaintiffs so as to engage Article 40.5 of the Constitution which provides: "*the dwelling of every citizen is inviolable and shall not be forcibly entered save in accordance with law.*"

(3) Whether to grant a full injunction or a partial injunction & damages

209. It was submitted that the defendants had not engaged in a way that would entitle them to avail of damages *in lieu* of an injunction. They had not behaved in a neighbourly way. They had not given any advance notice that they would make this argument. It was submitted that the injury to the plaintiffs' rights was not small and could not be adequately compensated by a small money payment. Furthermore, the fact that the defendants might be able or willing to pay for the future nuisance was not an appropriate ground to substitute damages. Overall, it was submitted that this was not an appropriate case for an order allowing the nuisance to continue.

210. It was submitted that the plaintiffs are *prima facie* entitled to an injunction and while there was a broad discretion there were no significant factors that would disentitle the plaintiffs to an injunction to fully restrain the nuisance.

211. Without prejudice to those arguments, it was submitted that if the nuisance was to be allowed to continue in part and damages awarded, then these damages should take into account the profits that the defendant makes by continuing the nuisance, as this was an indicator of what the defendants might consider reasonable to pay to acquire the plaintiffs' property right. At a minimum, the damages in this scenario should take account of the reduction in capital value of the plaintiffs home.

212. In addition, it was submitted that if the nuisance in part was to be allowed continue then the plaintiffs would have to give serious consideration to moving from their home. In that scenario, the plaintiffs should be awarded a sufficient sum to enable them to buy an equivalent site and rebuild a home to the equivalent standard of their current home; in other words, reinstatement value.
213. Attention was drawn to some of the English cases and the judgments therein, in particular Lord Mance who in *Lawrence v Fen Tigers Ltd* [2014] 2 AER 622 expresses the view that the right to enjoy ones home without disturbance “*is one which I would believe that many, indeed most, people value for reasons largely if not entirely independent of money*”; see page 664, para. 68.
214. In addition attention was drawn to the authorities (for example *AIB v Diamond* [2012] 3 IR 549, Clarke J. at p590) that point out that even if a value can be put on the loss of a property right that in general a defendant should not be entitled to pay damages to be allowed infringe a person’s property rights.

(4) Aggravated damages

215. It was submitted that the defendants approach to the complaints of the plaintiffs and their lack of substantive engagement and their failure to make any efforts to ameliorate the nuisance had caused additional hurt and distress to the plaintiffs and therefore merited an award of aggravated damages.

(5) Punitive / Exemplary damages

216. It was submitted that the pleaded case in relation to punitive / exemplary damages had not been answered substantially by the defendants. The evidence adduced was not contradicted and this evidence indicated that substantial revenues were being generated from the wind farm and the defendants had made a number of identifiable decisions to simply ignore, or not engage in any substantial way, with the plaintiffs’ complaints. This merited, it was submitted, punitive/exemplary damages.

IX. THE DEFENDANTS’ SUBMISSIONS

217. I propose to outline a summary of the main submissions on behalf of the defendants on these five issues.

(1) The assessment of damages for nuisance to date

218. The defendants submit that, based principally on the English caselaw (see *Hunter v Canary Wharf* [1997] AC 655 and *Dobson v Thames Water* [2009] 3 AER 319), the damages for the nuisance to date should be measured by estimating the notional impact on the capital value of the plaintiffs' property. According to the defendants' expert this was in a range of 13% up to 18% (being 17% for the noise and 1% for the shadow flicker) of the agreed value of €844,000.00.
219. The defendants' figure for the damages for the nuisance to date is, using this approach, therefore up to €151,920. On the other hand, using this approach, the plaintiffs' valuer estimated that the reduction in the capital value was €394,000 (the plaintiffs' expert estimated that the house was only worth €450,000 due to the nuisance). According to this approach, separate awards are not to be assessed for each plaintiff and nor is the amount of the damage to be based on the duration of the nuisance (save to the extent that same might influence the estimated drop in capital value) nor the amount of people living in the house; see *Hunter* and *Dobson*.
220. It was submitted that any comparison with the damages regime for personal injuries would not be appropriate; reference was made to *Hunter v Canary Wharf*.
221. That said, the defendants submitted that damages are a flexible remedy and should be flexible enough to ensure justice in each case and that accordingly, the court was not "hide bound by any particular rule". The defendants referred to *Munnelly v Calcon* [1978] IR 387 where Kenny J. states at p405: "*The dominant rule of law in assessing damages is the principle of restitutio in integrum and subsidiary rules can be justified only if they give effect to that dominant rule.*"

(2) The constitutional claims pursuant to Articles 40.3 and 40.5

222. It was submitted that there was no basis for considering any claims under the Constitution as the tort of nuisance adequately protected the relevant rights and interests of the plaintiffs; reference was made to *Hanrahan and Clarke v O'Gorman* [2014] 3 IR 340, where it is well established that a plaintiff may only rely on constitutional torts where the ordinary law of tort is insufficient to protect the rights asserted.

(3) Whether to grant a full injunction or a partial injunction & damages

223. The defendants accepted that the threshold for granting an injunction had been passed and that the only issue in this regard was the extent of the injunction.
224. They submitted that the court had an undoubted wide discretion as to whether to grant the full injunction or, whether instead, to grant a partial injunction combined with an award of damages for the future nuisance that the defendants admitted they would be committing.
225. They referred to the fact that the proposed shutdowns would address the most sensitive times of intrusion on the plaintiffs. Based on the defendants' proposal of nighttime shutdowns (10pm to 7am) and shutdowns during the morning at weekends and on public holidays (7am to 11am), the defendants' valuer estimated that the damage to the capital value of the plaintiffs' home would be approximately half his estimate for the damage to date, in other words up to €71,740 (it is to be assumed that the shadow flicker is sorted out, so the "half" is actually half of a range of 12-17%). This would be, it was submitted, the quantification of the damages for allowing the defendants to continue the nuisance outside of those hours. This was said to be based on a timeframe of eight years (i.e. up to 2033) when the planning permission will expire. The total award of damages then to the plaintiffs would, *according to the defendants*, be up to €223,660. This figure would be higher again if the court leaned more towards the values expressed by the plaintiffs' valuer.
226. The defendants submitted that the damages for future nuisance should not be assessed on the basis of the re-instatement cost of the plaintiffs' home as this measure of damage was reserved for cases where there is physical damage to the property.
227. The defendants accepted that they could not meet the *Shelfer* test (*Shelfer v City of London Electric Company* [1895] 1 Ch 287), not least because on their own analysis, the damages that should be awarded to the plaintiffs are substantial. Even on their figures, the damages for past and future nuisance (with a partial shutdown of the facility) are €223,660 and could not be described as 'small'. Rather, they submitted that this was no longer fatal and they relied on English authorities for this argument, such as *Lawrence v Fen Tigers* [2014] 2 AER 622, which view the *Shelfer* test as just one, rather than the only, pathway towards avoiding an injunction and being allowed pay damages instead.
228. They said that the public interest was relevant to the remedy and they referred extensively to Ireland's legal and international commitments to climate action and developing renewable energy and to the decision in *Coolglass v An Bord Pleanála* [2025] IEHC 1 and to *Webster (No. 1)* at para 42 and to the existence of the planning permission for the wind farm.

229. They referred to the discretion to award damages instead of an injunction as stemming from Lord Cairns Act (section 2 of the Chancery Amendment Act, 1858) and they said this was still law in Ireland. The defendants contended that Lord Cairns Act along with the common law principles of nuisance, should be interpreted and applied where possible in a manner consistent with Ireland's EU and ECHR climate obligations. Overall though, it was accepted that the public interest was not a 'trump card' in this case but was a factor to be weighed in the exercise of the court's discretion.

230. They also submitted that to order a full shutdown would be excessively oppressive to the defendants and would cause Wexwind to become insolvent. In their submission, their own proposal of partial shutdowns would bring the wind farm close to the edge of viability and would, it was submitted, require re-financing.

(4) Aggravated damages

231. The defendants referred to the fact that liability had been admitted on Day 11 and an apology had been made on Day 19 and they submitted that "*latterly, at the very least, the Defendants have behaved appropriately before the Court.*"

(5) Punitive / exemplary damages

232. The defendants submitted that these types of damages would not be appropriate and are only for exceptional cases such as where the defendants behaviour is, as in *Crofter Properties v Genport (No.2)* [2005] 4 IR 28, "*...quite beyond the bounds of normal civilised behaviour and quite outside accepted commercial relationships to gain benefit for the plaintiff. Such an award should not be excessive but should be sufficient to punish the behaviour on behalf of the plaintiff to intentionally publish defamatory matter of the defendant*".

X. RELEVANT LEGAL PRINCIPLES

233. The relevant legal principles will now be discussed in the context of each of the aforementioned issues.

(1) The assessment of damages for nuisance to date

234. Firstly the legal test for the tort of nuisance has recently been comprehensively considered by the High Court in the judgment of Ms. Justice Egan of 8 March 2024 in *Webster (No.1)*; see paragraphs 28 et seq. Both sides adopted the analysis of Egan J. as to the approach to

be taken to assessing a noise nuisance from a wind farm. As indicated by Egan J. in *Webster (No.1)* the relevant legal principles are described by the Supreme Court in *Hanrahan* where Henchy J. identified the legal basis of the tort of nuisance as follows:

"To provide a basis for the award of damages for the private nuisance relied on, the plaintiffs have to show that they been interfered with, over a substantial period of time, in the use and enjoyment of their farm, as result of the way the defendants conduct their operations in the factory..."

Later in *Hanrahan* Henchy J. states:-

"The case for damages in nuisance... is made out if the interference is so pronounced and prolonged or repeated that a person of normal or average sensibilities should not be expected to put up with it.... It is enough if it can be said that a reasonable person in the plaintiff's circumstances should not be expected to tolerate the smell without requiring the defendants to make financial amends".

235. As Egan J. states in *Webster (No.1)* "to succeed in a claim for nuisance the plaintiff must show interference with the ordinary use, enjoyment and comfort of their property ... nuisance is always assessed by reference to the character of the particular locality", see para.s 30 and 346 of *Webster (No.1)*.

236. As indicated above in Sections VIII and IX there was some divergence between the parties as to the approach to be taken to measuring and assessing the damages for the nuisance to date. While the defendants urged that the matter should be approached on the basis of a notional decrease in the capital value of the plaintiffs' property, they nonetheless conceded that damages is a sufficiently flexible remedy to ensure that justice is done in the case and the court is not hidebound by any particular rule or dictum.

237. In *Webster (No.1)* at paragraph 640, Egan J. refers to the approach adopted in England as set out in the case of *Hunter v. Canary Wharf* [1997] AC 655 where Lord Hoffman indicated that the correct approach was to consider the injury to the amenity of the land and not to the persons thereon. Consequently, as was found in *Hunter*, the damages are not therefore increased by there being more than one occupier. At para. 643 Egan J states as follows:

"It appears this not been the approach taken in this jurisdiction. In Patterson v. Murphy [1978] ILRM 85 blasting on the defendant's land caused physical harm to the plaintiff's residence. The plaintiffs were awarded damages for the repair of the property, but it was also held that general damages were payable to each of the plaintiff separately for annoyance, discomfort, inconvenience and mental distress." (underlined for emphasis).

238. In *Patterson Costello J* at page 99 states that "general damages are payable to each of the plaintiffs separately for annoyance, discomfort, inconvenience and mental stress". *Patterson* included a claim for damages for nuisance as a result of, amongst other things, the noise being generated by the blasting operations taking place at the defendant's quarry.

239. At page 99 *Costello J* states as follows in relation to general damages:

"General damages are payable to each of the plaintiffs separately for annoyance, discomfort, inconvenience and mental distress. In measuring the sums payable I have taken into account not just the conditions at Shillelagh Lodge from the summer of last year until 12 December [Note: a period of approximately six months, from early summer to 12 December of 1977] but also the fact that the plaintiffs had to move to rented accommodation with all the inconvenience thereby resulting. Whilst it may be that Mrs Paterson suffered more acutely than Mr Patterson from the nuisance it must be borne in mind that Mr Patterson had an additional strain associated with his professional career as he was most particularly affected by the lack of proper facilities for his practice in the rented accommodation. I conclude that a sum of £500 should be paid to each under this general heading and that both defendants are jointly liable for these payments."

240. In *Hanrahan v. Merck Sharp & Dohme (Ireland) Ltd* [1988] ILRM 629 the Supreme Court had to consider a case involving a claim for damages for, inter alia, discomfort caused by smells from the defendant's nearby factory. The Supreme Court treated the claim as one in nuisance. The evidence in the High Court was that the plaintiffs complained of intense and frequent objectionable smells from the defendant's factory and that these were so frequent, pronounced and prolonged that each of the plaintiffs had made out a case for damages in nuisance for offensive smells from the factory. At page 640 *Henchy J.* states as follows:

"As I have pointed out earlier in this judgment, by reference to the cited passage from the judgment of Gannon J. in Halpin v. Tara Mines, where the conduct relied on as constituting a nuisance is said to be an interference with the plaintiffs comfort in the enjoyment of his property, the test is whether the interference is beyond what an objectively reasonable person should have to put up with in the circumstances of the case. The plaintiff is not entitled to insist that his personal nicety of taste or fastidiousness of requirements should be treated as inviolable. The case for damages in nuisance - we are not concerned here with the question of an injunction - is made out if the interference is so pronounced and prolonged or repeated that a person of normal or average sensibilities should not be expected to put up with it. It is not necessary that an interference by objectionable smell should be so odious or damaging that it affects the plaintiffs' health. It is enough if it can be said that a

reasonable person in the plaintiffs' circumstances should not be expected to tolerate the smell without requiring the defendants, to make financial amends. I consider that the plaintiffs have made out such a case.

I would hold that each of the three plaintiffs has made out a case for damages for nuisance caused by offensive smells from the defendants' factory. (underlined for emphasis)

241. The matter was then remitted to the High Court for the assessment of those damages. Nonetheless, the precise basis upon which those general damages for nuisance caused by offensive smells might be assessed does not appear to have been argued or considered in *Hanrahan*. Accordingly, it is worth turning to some of the underlying principles by which general damages should be assessed.
242. There are well accepted general principles in relation to any assessment of general damages. For example in *MN v SM* [2005] 4 IR 461 at para 38 Denham J. states "*the three elements, fairness to the plaintiff, fairness to the defendant and proportionality to the general scheme of damages awarded by a court, fall to be balanced, weighed and determined*".
243. These principles underlie the Court's jurisdiction when it comes to general damages. These principles require awards of damages to be fair and reasonable to both claimant and defendant. The award must be proportionate to the level and nature of the injury or damage sustained and must also be proportionate when viewed in the context of awards of damages commonly made in cases involving injuries of a greater or lesser magnitude, *per* Denham J. in *MN v. SM* and Clarke C.J. in *Morrissey v. HSE* [2024] 1 IR 103.
244. In addition, further helpful general principles are set out in the case of *Munnelly v Calcon Ltd* [1978] IR 387 where Henchy J. considers the principle of *restitutio in integrum* which underpins the law of damages in cases such as this. *Munnelly* was a case dealing with a claim for damages for negligence. Part of the plaintiff's house collapsed as a result of the alleged negligence of the defendants who were building a house next door. At p. 399 Henchy J. states:
- "In my view the particular measure of damages allowed should be objectively chosen by the court as being that which is best calculated, in all the circumstances of the particular case, to put the plaintiff fairly and reasonably in the position in which he was before the damage occurred, so far as a pecuniary award can do so"*.

245. *Munnelly* was dealing with the particular issue of a claim for reinstatement costs. The judgment of Henchy J. contains helpful *dicta* in relation to some of the underpinning principles to a court's assessment of damages. Henchy J. cites from May J.'s judgment in *C.R. Taylor Ltd v. Hepworths Ltd* [1977] 1 WLR 659 at page 667 where May J. states:

"The various decided cases on each side of the line to which my attention has been drawn, and to some of which I have referred in this judgment, show in my opinion merely the application in them of two basic principles of law to the facts of those various cases. These two basic principles are, first, that whenever damages are to be awarded against a tortfeasor or against a man who has broken a contract, then those damages shall be such as will, so far as money can, put the plaintiff in the same position as he would have been had the tort or breach of contract not occurred. But secondly, the damages to be awarded are to be reasonable, reasonable that is as between the plaintiff on the one hand and the defendant on the other."

246. Henchy J. then states at p.400:-

"I accept those two principles as being basic to, although not necessarily exhaustive of, the concept of restitutio in integrum, on which the law of damages rests in cases such as this. It is in the application of those principles that difficulty may arise, for a court, in endeavouring to award a sum which will be both compensatory and reasonable, will be called on to give consideration, with emphasis varying from case to case, to matters such as the nature of the property, the plaintiff's relation to it, the nature of the wrongful act causing the damage, the conduct of the parties subsequent to the wrongful act, and the pecuniary, economic or other relevant implications or consequences of reinstatement damages as compared with diminished-value damages. The reported cases, therefore, require to be viewed primarily as exemplifications of the application to special facts of the two principles to which I have referred."

247. In *Munnelly*, Kenny J. states at p.405:

"The dominant rule of law in assessing damages is the principle of restitutio in integrum and subsidiary rules can be justified only if they give effect to that dominant rule."

248. As indicated above in Section IX, the submissions made on behalf of the defendants were that the court should follow the approach set out in the English cases and in particular in *Hunter* and in *Dobson v. Thames Water Utilities Ltd and another* [2009] EWCA civ. 28.

249. The Court of Appeal in *Dobson* indicated that the issue of damages in the context of a nuisance was normally to be assessed by means of the damage to the value of the property.

250. In *Hunter*, Lord Hoffman states on page 706:-

"[I]nconvenience annoyance or even illness suffered by persons on land as a result of smells or dust are not damage consequential upon the injury to the land. It is rather the other way about: the injury to the amenity of the land consists in the fact that the persons upon it are liable to suffer inconvenience, annoyance or illness.

It follows that damage for nuisance recoverable by the possessor or occupier may be affected by the size, commodiousness and value of his property but cannot be increased merely because more people are in occupation and therefore suffer greater collective discomfort. If more than one person has an interest in the property, the damages will have to be divided among them."

251. In *Dobson*, Waller LJ, commenting on the case of *Bone v Seale*, which dealt with nuisance caused by smells from a pigsty, stated at page 331:

"it seems to me that the value of the right to occupy a house which smells of pigs must be less than the value of the occupation of an equivalent house which does not. In the case of a transitory nuisance, the capital value of the property will seldom be reduced. But the owner or occupier is entitled to compensation for the diminution in the amenity value of the property during the period for which the nuisance persisted. To some extent this involves placing a value on intangibles. But estate agents do this all the time. The law of the damage is sufficiently flexible to be able to do justice in such a case."

252. Commenting on the judgments of the House of Lords in *Hunter v. Canary Wharf* Waller LJ at p333 in *Dobson* states as follows at para. 31:

"31. The speeches of the majority thus clearly establish that damages in nuisance are for injury to the property and not to the sensibilities of the occupiers. That is so, as much for the case of the transitory nuisance interfering with the comfort and enjoyment of the land as it is for the case of the nuisance which occasions permanent injury to the land and to its capital value, or other pecuniary loss."

253. In the context of how to assess damages Waller L.J. refers again to *Hunter* at para. 32 and states:

"Lord Hoffmann contemplated estate agents valuing the difference between the right to occupy a house without the nuisance and the right to occupy one with it that is to say valuing in the loss of (notional) rental value."

254. Then at para. 35, Waller L.J. in *Dobson* states:

"It follows that the actual impact upon the occupiers of the land, although not formally the measure of common law damages for loss of amenity, will in practice be relevant to the assessment of such damages in many cases, including such as the present where a family home is in question and no physical injury to the property loss, of capital value, loss of rent or other pecuniary damage, arises."

255. In the Australian case of *Uren v. Bald Hills Wind Farm* [2022] VSC 145, Ms. Justice Richards, then in the High Court, in the context of a noise nuisance claim from wind turbines awarded both the plaintiffs damages for past loss of amenity by means of general damages in particular amounts of AUD\$12,000.00 each, per year of the nuisance.

256. Richards J. then considers the legal principles relating to the assessment of damages for the future nuisance and indicates that, had she decided to award damages for future nuisance, that she would have approached the matter by assessing the decline in value of the plaintiff's property, see para 373 of *Uren*.

257. On the assessment of damages *Binchy* Law of Torts 4th Edition at para. 24.73 state as follows: –

"The Irish courts have addressed this issue after Hunter. In RDS v. Yeats, Shanley J. having referred to the Hunter restrictions, observed that in Hanrahan "a different and more flexible approach appears to have been taken on the issue of who has the right to sue". In the instant case, the plaintiff was not just the occupier of the lands but also their owner and was entitled to their exclusive possession. Since on any view it had the right to sue for private nuisance, Shanley J. found it unnecessary to consider the difference of approach that appeared to have emerged between the Supreme Court and the House of Lords."

258. While this commentary refers to a divergence with the approach in England as to who could sue, in so far as the underpinning principles referred to in the English cases may have had a limiting effect on who could sue, I am also satisfied that the approach identified in *Hunter* and *Dobson* places too much emphasis on the capital value of the property in the context of assessing damages for what may be a transitory nuisance such as from noise or smells.

259. Overall, I am satisfied that the dicta referred to in the Irish cases sets out the appropriate guiding principles for assessing the damages in this case. *Hanrahan, Patterson and Webster (No.1)* confirm that general damages can be awarded to each of the plaintiffs in this case for the effect of the nuisance to date. The implications of this analysis will be discussed further in Section XI below.

(2) The constitutional claims pursuant to Articles 40.3 and 40.5

260. In *Sullivan v. Boylan (No.2)* [2013] IHEC 104 Hogan J considers the plaintiffs claim pursuant to Article 40.5 of the Constitution rather than the tort of nuisance and he relied on both Article 40.3 and Article 40.5. The court granted relief for the plaintiff against a defendant who was effectively watching and besetting the plaintiff's home in circumstances where the court felt that the tort of nuisance might not be adequate to address the situation. In relation to Article 40.5 the court held that the rights of the residents of a dwelling to security and protection against all comers and privacy were all necessary features of the inviolability of the dwelling and were rights enjoyed by all who resided in the dwelling and not simply by those who had legal title to the property. This case indicates the ability of the court to rely on the Constitution if there is some deficiency, or limitation, to the existing torts that might otherwise normally apply.

261. In general however, the law is clear, that there is no need to invoke a constitutional right where an existing common law remedy applies. In *Hanrahan* Henchy J. at page 635-636 states as follows:

"The plaintiffs have also invoked the Constitution in support of their argument as to the onus of proof. They contend that the tort relied on by them in support of their claims is but a reflection of the duty imposed on the State by Art. 40.3 of the Constitution in regard to their personal rights and property rights. The relevant constitutional provisions are:

"The state guarantees in its laws to respect, and, as far as practicable, by its laws to defend and vindicate the personal rights of the citizen" (Art. 40.3.1).

"The State shall, in particular, by its laws protect as best it may from unjust attack and in the case of injustice done, vindicate the life, person, good name, and property rights of every citizen" (Art. 40.3.2).

I agree that the tort of nuisance relied on in this case may be said to be an implementation of the State's duties under those provisions as to the personal rights and property rights of the plaintiffs as citizens. The particular duty pointed to by the

plaintiffs is the duty to vindicate the personal right to bodily integrity and the property right to their land and livestock. They say that the vindication of those rights under the constitutional guarantee is not properly effective by leaving them to their rights as plaintiffs in an action for nuisance and that the vindication they are guaranteed requires that once they show that they have been damnified in their person or property as alleged, it should be for the defendants to show that emissions from their factory were not the cause. So far as I am aware, the constitutional provisions relied on have never been used in the courts to shape the form of any existing tort or to change the normal onus of proof."

262. Henchy J. says that it must be shown that the tort of nuisance is "*plainly inadequate to effectuate the constitutional guarantee in question*" and he continues on page 636 "*... but when he founds his action on an existing tort he is normally confined to the limitations of that tort. It might be different if it could be shown that the tort in question is basically ineffective to protect his constitutional right*".

263. In *Hanrahan*, the court was dealing with was an argument that the onus of proof should be reversed and the Supreme Court upheld the High Court's rejection of that argument.

264. The question is dealt with further in the case of *Clarke v. O'Gorman* [2014] 3 I.R. 340. The Supreme Court held that it is only where it could be shown that the existing law did not adequately protect the constitutional rights of the plaintiff that a separate claim for breach of constitutional rights could be invoked. O'Donnell J. (as he then was) at page 359 addresses this question in further detail where he states at paragraph 34:

"The intersection between claims for damages for breach constitutional rights and claims in tort was discussed in Hanrahan v. Merck Sharp & Dohme. The effect of that decision is that the existing torts and other causes of action known to common law are to be considered the method by which the State performs its obligation to vindicate the constitutional rights of the citizen. It is only therefore if it can be shown that the existing law does not adequately protect the constitutional rights of the citizen that a separate claim for breach of constitutional rights can be invoked." (underlined for emphasis).

265. In addition, the plaintiff in this case invited the court to rely on Article 40.5 of the Constitution which provides:

"The dwelling of every citizen is inviolable and shall not be forcibly entered save in accordance with law".

266. Article 40.5 of the Constitution has some overlap with Article 8.1 of the European Convention on Human Rights which provides as follows:

"Article 8.1 Everyone has the right to respect for his private and family life, his home and his correspondence."

267. The ECtHR considered Article 8 in the context of the climate crisis in the case of *Verein Klimasenioren Schweiz and Others v. Switzerland*, Application Number 53600/20, ECtHR, Grand Chamber judgment of the Court, Ms. Justice Siofra O'Leary President, 9 April 2024. The case involved applicants who were older women in Switzerland and who had been exposed, by virtue of climate change, to the increasing occurrence and intensity of heat waves in their homes. The ECtHR considered the degree to which environmental nuisances could come within the scope of Article 8 of the ECHR. At para. 514 the European Court of Human Rights state as follows:

"514. According to the existing case-law, in order to fall within the scope of Article 8 of the Convention, complaints relating to environmental nuisances have to show, first, that there was an "actual interference" with the applicant's enjoyment of his or her private or family life or home, and, secondly that a certain level of severity was attained. In other words, they have to show that the alleged environmental nuisance was serious enough to affect adversely, to a sufficient extent, the applicants' enjoyment of their right to respect for their private and family life and their home."

268. The resonances between this analysis of the interaction between Article 8 of the ECHR in relation to environmental nuisances (in that case excessive heat waves) and the common law development of the law of nuisance are readily apparent.

269. The judgment of the Court (O'Leary P.), went on to conclude that the applicant's Article 8 rights had been violated by Switzerland's failure, amongst other things, to quantify adequately through carbon budgets national Greenhouse Gas emissions limitations.

270. The question raised therefore from the foregoing principles are the degree to which the plaintiffs here have rights engaged pursuant to Article 40.3 and Article 40.5 and whether the existing tort of nuisance can be said to "not adequately protect the constitutional rights of the citizen" such "that a separate claim for breach of constitutional rights can be invoked".

(3) The issue of whether to grant a full injunction or a partial injunction & damages

271. The parties referred extensively to the UK Supreme Court decision in *Lawrence v. Fen Tigers Ltd* [2014] 2 AER 622 and *Fearn v. Tate Gallery* [2023] 2 AER 1, where Leggatt J. helpfully discusses *Lawrence*.
272. *Lawrence* concerned a claim for damages and an injunction in the context of a noise nuisance from a motor racing stadium and motocross circuit.
273. The lead judgment was delivered by the President of the Court, Lord Neuberger. This judgment points out how the grant of planning permission for a particular use can be relevant to a nuisance claim in potentially two ways. Firstly the planning permission can permit the very noise complained of and secondly it facilitates the defendant making an argument that the character of the locality has been altered as a result of the permission. At para. 100 on page 649 Lord Neuberger addresses the question of awarding damages instead of an injunction in considerable detail. At paragraph 101 Lord Neuberger refers to Lord Cairns Act and discusses the question as to what principles govern the exercise of the court's jurisdiction to award damages instead of an injunction. The 19th century decision of *Shelfer* mentioned above is referred to in considerable detail. At paragraph 105 he refers to the decision of Lord McNaughton in *Colls v. Home and Colonial Store Ltd* [1904] AC 179 who at page 193 refers to the question of whether "the defendant has acted fairly and not in an unneighbourly spirit". The judgment discusses how during the 20th century there had been considerable discussion as to the *Shelfer* approach and he concludes at para. 123 on p. 655 as follows:

"Where does that leave A L Smith LJ's four tests? While the application of any such series of tests cannot be mechanical, I would adopt a modified version of the view expressed by Romer LJ in Fishenden v. Higgs and Hill Ltd [1935] AER 435 at 448. First, the application of the four tests must not be such as to be fetter on the exercise of the court's discretion. Secondly, it would, in the absence of additional relevant circumstances pointing the other way, normally be right to refuse an injunction if those four tests were satisfied. Thirdly, the fact that those tests are not all satisfied does not mean that an injunction should be granted."

274. This judgment also addresses whether or not the court should take account of the public interest and he concludes that it is difficult to envisage any circumstances in which the public interest arises that it could not as a matter of law be a relevant factor. Neuberger P. also states at paragraph 124 as follows:

"The fact that the defendant's business may have to shutdown if the injunction is granted should, it seems to me, obviously be a relevant fact, and it is hard to see

why relevance should not extend to the fact that a number of the defendant's employees would lose their livelihood, although in many cases that may well not be sufficient to justify the refusal of an injunction".

275. He also concludes that planning permission for the activity is relevant. At para. 125 he states:

"Accordingly, the existence of a planning permission which expressly or inherently authorises carrying on an activity in such way as to cause a nuisance by noise or the like, can be a factor in favour of refusing an injunction compensating the claimant in damages. This factor would have real force in cases where it was clear that the planning authority have been reasonably and fairly influenced by the public benefit of the activity where the activity cannot be carried out without causing the nuisance complained of. However even in such cases the court would have to weigh up all the competing factors."

276. Lord Neuberger also agrees with Lord Mance (who in turn agrees with "Lord Neuberger's nuanced approach") and with the statement at paragraph 168 in particular, where Lord Mance states as follows:

"I would only add in relation to remedy that the right to enjoy one's home without disturbance is one which I would believe that many, indeed most, people value for reasons largely if not entirely independent of money".

277. Lord Neuberger refers to proportionality in para. 126 in this context:

"In some such cases, the court may well be impressed by a defendant's argument that an injunction would involve a loss to the public or a waste of resources on account of what may be a single claimant, or that the financial implications of an injunction for the defendant would be disproportionate to the damage done to the claimant if she was left to her claim in damages. In many such cases, particularly where an injunction would in fact stop the defendant from pursuing the activities, an injunction may well not be the appropriate remedy."

278. In relation the process of assessing damages in lieu of an injunction in the context of awarding damages for what will be a future nuisance, Lord Neuberger observed the following paragraph 128:

"A final point which it is right to mention on this issue is the measure of damages, where a judge decides to award damages instead of an injunction. It seems to me at least arguable that where a claimant has a prima facie right to an injunction to

restrain a nuisance, and the court decides to award damages instead, those damages should not always be limited to the value of the consequent reduction in the value of the claimant's property. While double counting must be avoided, the damages might well, at least where it was appropriate, also include the loss of the claimant's ability to enforce her rights which may often be assessed by reference to the benefit to the defendant of not suffering an injunction."

279. This approach gets support from the reasoning of Bingham MR in *Jaggard v. Sawyer* [1995] 2 AER 189. The same approach was supported by Millett LJ in *Jaggard*:

"... there is no reason why compensatory damages for future trespassers and continuing breaches of covenant should not reflect the value of the rights which she has lost, or why such damages should not be measured by the amount which she could reasonably have expected to receive for their release."

280. *Fearn* was a case involving nuisance whereby it was claimed that members of the public visiting the Tate could view directly into the apartments of the plaintiffs from a viewing gallery walkway that had been added to the Tate Gallery. In *Fearn* the UK Supreme Court emphasised that the law of private nuisance was concerned with maintaining a balance between the conflicting rights of neighbouring landowners and that therefore not every interference with the persons use and enjoyment of their land was actually nuisance. The Supreme Court also pointed out that it was not a defence that the activity carried on by the defendant was for a public benefit. In deciding whether one party's use had infringed the others rights, the public utility of the conflicting uses was not relevant. The public benefit of the use causing the nuisance was, however, relevant to remedy. The Court held that the public interest might sometimes justify awarding damages rather than granting an injunction to restrain the defendant's harmful activity but it could not justify denying the victim any remedy at all.

281. Lord Leggatt gives the key speech for the majority and in his judgment from para. 9 onwards he discusses the scope of private nuisance. He states at para. 11:

"It follows from the nature of the tort of private nuisance that the harm from which the law protects the claimant is diminution in the utility and amenity value of the claimant's land, and not personal discomfort to the persons who are occupying it".

282. Lord Leggatt addresses the concept of reciprocity in the context of the law of nuisance on page 15 of his judgment stating at para. 34:

"The underlying justification for those 'well-settled' tests was spelt out by Lord Millett in Southwark when he explained ([1999] 4 AER 449 at 464) that:

"The governing principle is good neighbourliness and this involves reciprocity. A landowner must have the same consideration for his neighbours as he would expect his neighbour to show for him."

283. In relation to the public interest, Lord Leggatt states at para. 114 on page 36 that the public interest is relevant to the remedy but not to liability, and he explains why this is so from para. 121 *et seq.* At para. 127 *et seq.* Lord Leggatt discusses the question of damages in lieu of an injunction and he refers to Lord Cairns Act and the seminal decision in *Shelfer*.

284. At paragraph 129 he turns to discuss the decision mentioned of the UK Supreme Court in *Lawrence*, discussed above. He states as follows:

"All the members of the court agreed that, in the words of Lord Carnworth at para [239], 'the opportunity should be taken to signal a move away from the strict criteria derived from Shelfer'. Different opinions were expressed, however, about how far this move should go. Lord Sumption saw "much to be said for the view that damages are ordinarily an adequate remedy for nuisance and that an injunction should not usually be granted in case where it is likely that conflicting interests are engaged other than the parties' interests". This drew a protest from Lord Mance, who emphasised that "the right to enjoy ones' home without disturbance is one which I would believe that many, indeed most, people value for reasons largely if not entirely independent of money". The majority agreed with Lord Neuberger, for whom the court's power to award damages in lieu of an injunction 'involves a classic exercise of discretion, which should not as a matter of principle, be fettered'. Lord Neuberger recognised that nevertheless 'it is appropriate to give as much guidance as possible so as to ensure that, while the discretion is not fettered, its manner of exercise is as predictable as possible'."

285. Lord Leggatt continues however in para. 129 as follows:

"I think it is fair to say that - perhaps because of the divergent opinion of the Justices - there is little in the way of such guidance to be gleaned from his judgment. Lord Neuberger ended his discussion of this issue by acknowledging that 'we are at risk of introducing a degree of uncertainty into the law' but said that 'insofar as there can be clearer or more precise principles, they would have to be worked out in the way familiar to the common law, namely on a case-by-case basis'."

286. In deciding to remit the matter to the High Court, Lord Leggatt states as follows at para 132:

"In the circumstances, if the parties cannot reach agreement on a solution, a further hearing will be required to address the question of remedy which should take place before a judge of the Chancery Division. Without constraining the matters on which the court may choose to hear argument, they may need to include:-

(i) whether there is a public interest in maintaining the gallery with a 360° view capable of overriding the claimants' prima facie remedy of an injunction;

(ii) whether any remedial measures which the Tate may propose are sufficient to avoid an injunction or damages;

(iii) the scope of any injunction; and

(iv) questions of quantification of any award of damages."

287. The above guidance from Leggatt J. is useful as an approach to consider to this issue in this case. As it happens there was sufficient evidence adduced in this case to enable an analysis of similar questions.

288. Lord Cairns Act and the role of the Courts of Chancery are discussed in *Kirwan Injunctions Law in Practice* 3rd Edition at para.1 -17 et seq. *Kirwan* traces the origin of the Courts of Chancery at para. 1-18 and he describes how originally, as the Lord Chancellor's courts, they developed into a distinct judicial system retaining, from the period prior to the Reformation, concepts imported from the Ecclesiastical Courts and from Canon Law such as "conscience"; see para 1-19.

289. *Kirwan* also refers to the seminal decision of the Earl of Selbourne L.C. in *Ewing v Orr Ewing* (1883) 9 Appeal Cases 34 who states at p40:

"The courts of Equity in England are, and always have been courts of conscience, operating in personam and not in rem; and in the exercise of this personal jurisdiction they have always been accustomed to compel the performance of contracts and trusts as to subjects which were not either locally or racione domicilii within their jurisdiction".

290. On one view, Lord Cairns Act and the Judicature Act are essentially administrative in nature, so that for example, the provision we are concerned with here, section 2 of Lord Cairns Act enabled the Courts of Chancery to award damages in addition to or in substitution for an injunction. Equally in section 28 (11) of the Supreme Court of Judicature Act Ireland 1877

it provided that where there was a conflict between the rules of equity and the common law, then equity was to prevail; see Jessel MR in *Walsh v. Lonsdale* (1882) 21 Ch.D 9 at 14 and paragraph 1-39 of *Kirwan*.

291. *Kirwan* then discusses the *Shelfer* principles in light of the UK Supreme Court decision in *Lawrence*, discussed above. *Kirwan* contends "it is arguable that the approach in the *Lawrence* case is less dramatic than might at first appear; the fact that the principles in *Shelfer* were already approached as being working rules and no more than that is evident from the comments of Millett LJ in *Jaggard v Sawyer*". This analysis appears correct and gets recent support from the judgment of Egan J. in *Webster (No. 2)* [2025] IEHC 300 at para 200:-

"[A]s noted by Lord Leggatt in Fearn and others v. Board of Trustees of the Tate Gallery [2023] UKSC 4, ("Fearn"), there had been a move away from "the strict criteria derived from of Shelfer". Ultimately, departure from the Shelfer principles, on grounds of public interest or otherwise, is to be determined by the courts on a case by case basis."

292. Reference was to the decision of *Bellew v. Irish Cement Limited* [1948] I.R. 61 where the Supreme Court took the view that the court should not take the public interest into account in dealing with the rights of private parties in the context of an application for an interlocutory injunction to restrain a nuisance from a cement quarry, that was producing most of the cement, it was claimed, needed for the State's then public housing programme. As to whether this still remains good law is questioned in *McMahon and Binchy* Law of Torts 4th Edition at p1694 and in *Kirwan* at paras 4-143 to 4-148. In any event it is to be observed that *Bellew* was a decision in relation to an application for an interlocutory injunction and is therefore not strictly applicable to the scenario here. In addition, Egan J. in *Webster (No.2)* states as follows on this topic at para 201:-

"However, I note that, in the same case, Black J. took a different view [Black J. delivered a robust dissent] and held that although public convenience cannot affect the right of a private individual to a remedy for nuisance, it can be considered in determining which remedies should be granted. Furthermore, in Patterson v. Murphy, Costello J. acknowledged (pp. 99-100) that the public interest was to be taken into consideration (albeit that he found that none arose in the case before him)."

293. There were a number of matters in relation to this issue that were not in dispute as between the parties. In the context of the admitted nuisance here which is ongoing, it is agreed that *prima facie* the plaintiffs are entitled to an injunction. The defendants agreed that the

Court's discretion is wide. In *Halpin v. Tara Mines* [1976/7] ILRM 28 Gannon J. (in a judgment that was approved of by the Supreme Court in *Hanrahan*) at page 30 states as follows:

"As a general proposition I take it to be the law that an occupier of land, or of premises thereon, who embarks on operations or activities out of the ordinary must not cause or permit, inter alia, noises or vibrations to pass into his neighbour's property in such a way as materially to interfere with the ordinary comfort of the occupier of such property or in such a way as to cause physical damage to the property of his neighbour. Where such interference or such damage is shown to be a matter of some continuity, repetition, or persistence it founds an action for nuisance for which the appropriate remedy would be an order of the court restraining the harmful activities or operations whether accompanied or not by an award of damages by way of recompense".

294. In *Patterson v. Murphy* Costello J. at page 99 addressed the question of an injunction and states as follows:

"The defendants have submitted that even if an infringement of the plaintiffs' rights has been established the court has the discretion to award damages in lieu of an injunction and that it should do so in this case. I agree that relief by way of an injunction is a discretionary remedy. There are, however, well established principles on which the court exercises this discretion. The relevant ones for the purposes of this case can be summarised as follows:

- 1. When an infringement of the plaintiffs' right and a threatened further infringement to a material extent has been established the plaintiff is prima facie entitled to an injunction. There may be circumstances however depriving the plaintiff of this prima facie right but generally speaking the plaintiff will only be deprived of an injunction in very exceptional circumstances.*
- 2. If the injury to the plaintiffs' rights is small, and is one capable of being estimated in money, and is one which can be adequately compensated by a small money payment, and if the case is one in which it would be oppressive to the defendant to grant an injunction, then there are circumstances in which damages in lieu of an injunction may be granted.*
- 3. The conduct of the plaintiff may be such as to disentitle him to an injunction. The conduct of the defendant may be such as to disentitle him from seeking the substitution of damages for an injunction.*
- 4. The mere fact that the wrong-doer is able and willing to pay for the injury he has inflicted is not a ground for substituting damages.*

In the foregoing dicta, Costello J was largely adopting the approach outlined in the case of *Shelfer v. City of London Electric Companies* [1895] 1 CH 287.

295. In *Patterson*, at page 100 Costello J. then continues:

"In the present case there are no circumstances which can deprive the plaintiffs of the relief to which they are prima facie entitled. The infringement of their rights is a most serious one; the injury which they have suffered and will suffer if the nuisance is permitted to continue has been and will be a considerable one; damages would not adequately compensate them. I should add that whilst I am conscious of the financial consequences for the defendants of the granting of an injunction I do not think bearing in mind that the sale to the plaintiffs took place at a time when Mr. Murphy was aware of the possibility that quarrying operations in the adjoining field might take place, and bearing in mind that both defendants must have fully appreciated the great inconvenience to the plaintiffs which the quarrying operations would cause, that relief by way of an injunction could be termed oppressive."

296. Both parties referred to Lord Cairns Act, namely the Chancery Amendment Act 1858 and section 2 thereof which appears to be still in force:

"Section 2. In all cases in which the Court of Chancery has jurisdiction to entertain an application for an injunction against a breach of any covenant, contract, or agreement, or against the commission or continuance of any wrongful act, or for the specific performance of any covenant, contract, or agreement, it shall be lawful to the same court, if it shall think fit, to award damages to the party injured, either in addition to or in substitution for such injunction or specific performance; such damages may be assessed in such manner as the court shall direct."

297. Finally, further useful factors, such as the "behaviour and attitude" of both sides and whether notice of such an application for damages in lieu has been given by the defendant, are identified by Lord Neuberger at para 149 in *Lawrence*, where he states as follows:

"The final point is whether the judge should have awarded damages rather than an injunction ... The decision whether to award damages instead of an injunction can be dependent on a number of issues, including the behaviour and attitude of the parties. It is therefore a matter on which the trial judge is particularly well positioned to assess in a case such as this, where there was substantial oral evidence. Further, a defendant who wishes to argue that the court should award damages rather than an injunction should make it clear that he wishes to do so well in advance of the hearing, not least because the claimant may wish to adduce documentary or oral evidence on that issue which she would not otherwise consider relevant."

298. The foregoing principles will be considered further in the context of the decision on this issue set out below.

(4) Aggravated damages

299. There was no significant dispute as to the legal principles relating to awarding aggravated damages. These are set out in *Conway v INTO* [1991] 2 IR 305; see the judgment of Finlay C.J. at page 317 who describes them thus:-

"2. Aggravated damages, being compensatory damages increased by reason of

(a) the manner in which the wrong was committed, involving such elements as oppressiveness, arrogance or outrage, or

(b) the conduct of the wrongdoer after the commission of the wrong, such as a refusal to apologise or to ameliorate the harm done or the making of threats to repeat the wrong, or

(c) conduct of the wrongdoer and/or his representatives in the defence of the claim of the wronged plaintiff, up to and including the trial of the action.

Such a list of the circumstances which may aggravate compensatory damages until they can properly be classified as aggravated damages is not intended to be in any way finite or complete. Furthermore, the circumstances which may properly form an aggravating feature in the measurement of compensatory damages must, in many instances, be in part a recognition of the added hurt or insult to a plaintiff who has been wronged, and in part also a recognition of the cavalier or outrageous conduct of the defendant."

300. The *Uren* case provides a good example of how a court dealt with the issue of aggravated damages in a noise nuisance claim involving a wind farm. At para. 387 the Ms. Justice Richards noted that "a reasonable neighbour would have tried to reduce the noise; Bald Hills has not". Richards J. noted there that the operator had disputed the complaints with the local authority and concluded that it would have been better directed to finding a solution to "the gearbox tonality issue". Richards J. concluded that the defendant had not dealt properly with the plaintiff's reasonable legitimate complaints and that this "*at least doubled the impact of the loss of amenity each of them suffered at their homes*".

(5) Punitive / exemplary damages

301. The plaintiff relied on the authorities of *McIntyre v Lewis* [1991] 1 IR 121 and *Conway v INTO* [1991] 2 IR 305. In *McIntyre v Lewis* McCarthy J states that it is inconsistent with the dynamism of the common law to delimit in any restrictive way the nature of the development

of awards of aggravated or exemplary damages. These authorities point out that exemplary damages must refer to the conduct of the defendant. In *Conway*, Griffin J. at page 323 refers to whether or not the actions are a "deliberate and conscious disregard of the constitutional rights of the plaintiff".

302. In *Conway* at page 321 Finlay C.J. indicates that any award should be considered in the context of the outcome of the case as a whole and states as follows:-

"Bearing in mind the reasons for the existence of a right to award exemplary damages and the purposes which in my opinion a court must be seeking to achieve in making an award of exemplary damages, as a general principle they should not be awarded if in the opinion of the court the amount necessarily payable by the wrongdoer in the form of compensatory damages constituted a sufficient public disapproval of and punishment for the particular form of his wrongdoing. The reference by the learned trial judge in his judgment in this case to the approximate total or aggregate sum by way of exemplary damages which the defendants might have to pay in the multiple actions which they were facing seems to me to constitute a clear recognition by him of this general proposition, bearing in mind that he was at the same time as assessing these exemplary damages, assessing in the individual case compensatory damages as well."

XI. DECISION

The decision on each issue and the reasons for them, are now set out hereunder.

(1) *The amount of damages for the effect of the nuisance to date*

303. As indicated above, the defendants admitted liability for the nuisance as pleaded by the plaintiffs on Day 11 of the trial. Counsel for the defendants confirmed that there was no issue taken that any part of the plaintiffs' evidence exceeded the boundaries of the pleaded claim. The details and nature of the interference which the wind turbine noise caused to the plaintiffs use, comfort and enjoyment of their home is described in great detail earlier in this judgment in Section IV where there is a detailed summary of the experience of each plaintiff set out, followed by a summary of the independent descriptions and assessment of the level of the interference by the independent experts who gave evidence in the case.
304. Based on the decisions in *Patterson*, *Hanrahan* and *Webster (No.1)* referred to earlier in Section X (Relevant legal Principles), I am satisfied that it is appropriate to award each of the plaintiffs' general damages for the annoyance, discomfort, inconvenience and distress suffered as a result of the nuisance admitted by the defendants.

305. Those legal principles indicate that the amount to be awarded must be fair and reasonable to both sides; *MN v SN*, *Morrissey v HSE*. I am satisfied that the assessment must take account of the full duration of the nuisance and that the most straightforward manner in which to assess the damages in this case (where the nuisance and level of interference broadly continued in a similar manner from when it started) is to consider a sum appropriate to each plaintiff for each year of interference.
306. In that regard, in respect of each plaintiff the full account of their experience is set out above in Section IV. In particular, there are a number of particular features to the level of the interference which the nuisance caused. It interfered with their general ability to experience and enjoy their home as a place of refuge, rest and relaxation. There was no real escape from the noise for the reasons described earlier and explained by the experts. Secondly, the interference was particularly acute in terms of the sleep disturbance experienced by both plaintiffs. Next, they both experienced the loss of substantial enjoyment of their garden as a place to rest and relax and to carry out the ordinary tasks of maintaining and enjoying a sizeable garden in a rural location. The position for Ms. Moorhead was in general appreciably worse. She was in the home, in general, more than Mr. Byrne. Her depths of resilience and ability to cope were already stretched for the reasons described earlier in Section IV. Finally, both Mr. Byrne (usually in the evenings) and Ms. Moorhead worked in the home. Their ability to do this was also interfered with.
307. It is important to approach the assessment of damages through an objective lens. The experience and accounts of the interference by each plaintiff were supported by the independent experts. In terms of gauging where on the range of potential levels of interference these claims sit, Mr. Stigwood described the case as "extreme" and "one of the worst cases of wind turbine noise" he had come across. The international standards now recognise that amplitude modulation and low frequency noise have a deleterious effect on the wellbeing of people. The levels in this case often exceeded the levels considered tolerable. Mr. Corr, the defendants' valuer, described the case as an "outlier" and increased his original assessment of the value of the impact seventeen fold having considered the transcripts of the plaintiffs' evidence and that of Mr. Stigwood.
308. The tort of nuisance protects a property right and it permits of a remedy of general damages and permits of an award that is reasonable and fair to both sides. In this case, the common law remedy is protecting constitutional rights. Where there is substantial interference in the ordinary use and enjoyment of a person's home for a sustained period of time, I accept the plaintiffs' submission that such damages should be meaningful.

309. On the defendants' approach, the court would award a single sum for damages to date based on the evidence of the expert valuers as to the notional reduction in the capital value of the plaintiffs' home. The expert valuers agreed that, absent the wind farm, the capital value of the plaintiffs' property is €844,000.00. As referred to above in Section IV(f)(iv), the defendants' expert estimates that the damage done to the agreed capital value of the home by the wind farm is between 15-20%, although 2% of this is for the visual impact about which complaint is not made. That means his estimate of the notional capital damage is between 13-18% of the agreed sum of €844,000.00, in other words between €109,720 and €151,920 (this range has a midpoint of €130,820). It will be recalled from Section IV(f)(iv) above, that Mr. Corr felt this case was an "outlier" in terms of how bad it was and he had initially only assessed the noise impact on the capital value of the home at 1% of its value.
310. The plaintiffs' expert in this regard was Mr. Anthony O'Regan, an experienced estate agent. He agreed the sum of €844,000.00 with Mr. Corr, as the value of the plaintiffs' property without the wind farm. In his view, the effect of the wind farm was more significant and he estimated that the value of the home was only €450,000.00 due to the nuisance, in other words a drop of €394,000.00.
311. On the defendants approach, the court would assess the damages for the nuisance to date by weighing the competing evidence of these two valuers and, based on that exercise, assessing damages at either somewhere in the range of the defendants' expert (€130,820.00 being the midpoint of Mr. Corr's range) or €394,000.00 or somewhere in between (as a reference point for example, €262,410.00 being the midpoint of the two valuers).
312. The defendants' submissions in this regard were carefully made and, correctly anchored in weighty English authorities. However, I am not satisfied that this is the correct approach in this case. It places too much weight on the capital value of the person's home in the circumstances of a noise nuisance which will be restrained by the Court and where the house (which itself sustained no physical damage) has not been sold as a result of the nuisance. The defendants' approach could lead to drastically different awards of general damages in cases where neighbours might have experienced very similar interferences with the use and enjoyment of their homes. For example, the interference with sleep, rest or relaxation in a garden reading a book, will in general be similar irrespective of the value of a person's home. There is an underlying constitutional right involved here and the approach to assessing damages must take account of the principles of equality that underpins any consideration of compensation for breach of a constitutional right. As it happens the Court is assessing those damages pursuant to the principles that govern the tort of nuisance but that remedy is sufficiently flexible to ensure a just approach and damages for the same wrong should be coherent whether looked through the prism of the common law or the Constitution.

313. In addition, the defendants' suggested approach in a case of this sort does not readily reflect the duration of the experience of the plaintiffs. In that regard, the defendant's valuer indicated that based on his research and the research referred to in his report, it was his opinion that there was academic evidence to suggest that in some studies the impact on the capital value of a property near a wind farm *reduced* over time. In other words, the longer a nuisance went on, the less damages a plaintiff would get. It was not clear if these studies differentiated significantly between homes where the residents were experiencing a substantial interference in their ordinary use and enjoyment of their home on the one hand, and properties which were simply near a wind farm, on the other. In any event, his evidence as to the notional impact on the capital value of the plaintiffs' home was not particularly anchored in the duration of the nuisance and indeed his report suggested that the impact on the capital value of a home near a wind farm *decreased* proportionality to the duration of exposure to the wind farm; see para 9.2(f) of Mr. Corr's report where he states "any negative impacts [on the capital value] dissipate with passage of time after the construction phase of the wind farm" and at para 9.1.5 Mr. Corr referred to research which he said supports the view that "the price effect decays over time". In this type of case, I am not satisfied that an approach should be adopted that does not appropriately reflect the duration of the exposure endured by each plaintiff. Indeed, it would be a curious outcome if the plaintiffs could have been awarded a higher amount of general damages for nuisance to date had the case been considered as one involving an exposure to six years of nuisance for example, rather than twelve. The position of course might be different in a case where the plaintiffs have decided to move and sell their home due to the nuisance; in those circumstances the impact of the noise nuisance on the capital value of their home might well loom more significantly as the key factor in assessing the amount of damages according to the general principles. However, by virtue of the outcome of this case it is not necessary for the plaintiffs to sell their home to escape the nuisance. In those circumstances, for the avoidance of doubt, this is not a case where the plaintiffs should be awarded both general damages and damages for the notional drop in the capital value of their home. I am not satisfied that this would be appropriate. As a result of the full injunction there will be no ongoing nuisance. In those circumstances, it would not be reasonable or appropriate where general damages are to be awarded to also award the plaintiffs an additional sum for the notional drop in capital value estimated by the valuers.

314. Turning then to the assessment of an appropriate sum for general damages, it should first be observed that there is little guidance in either *Paterson* or *Hanrahan* as to *how* that should be done. A starting point therefore is the underlying principles. These are discussed above in Section X. Firstly, *Hanrahan*, *Patterson* and *Webster (No.1)* confirm that general damages can be awarded to *each* of the plaintiffs for the effect of the nuisance to date. The starting principles for assessing those general are those described above in *MN v SN* and then in

Munnelly. The sum should be fair to both sides, objectively reasonable and proportionate to the wrong done.

315. The principle of *restitutio in integrum* looms large in the cases referred to; see *Munnelly* discussed above in particular. While restoring, by means of pecuniary award, a plaintiff to the position he or she was in, prior to the nuisance, is less clear as a guide in a case involving discomfort caused by noise or smells (compared to a physically damaged building), the cases nonetheless helpfully establish the following general propositions:-

- (i) the law of private nuisance protects a person's property right, namely the entitlement to the ordinary use, enjoyment and comfort of the person's property without substantial interference from their neighbour;
- (ii) the assessment of whether the interference is substantial is considered from the perspective of an objectively reasonable person and the interference should be pronounced and prolonged or repeated;
- (iii) a plaintiff who suffers such a nuisance so that it causes them upset, inconvenience or distress - even where these fall short of the level that would constitute a personal injury - due to for example noise or smells, is entitled to general damages;
- (iv) the general purpose of those general damages is to compensate the plaintiff by restoring them fairly and reasonably to the position they were in prior to the nuisance;
- (v) in the assessment of those general damages in such a case, the measure of the damages should be fair and reasonable to both sides and proportionate with the wrong sustained and with the general approach of the courts to awards in analogous cases;
- (vi) the court should consider all the relevant factors in the particular case, including the nature of the plaintiff's property, the plaintiff's relation to it, the nature of the wrongful act causing the nuisance, the conduct of the parties subsequent to the wrongful act, and the pecuniary, economic or other relevant implications or consequences of the wrongful act complained of;
- (vii) as the tort of private nuisance protects a property right, it may well be helpful to consider whether the nuisance complained of has caused a notional damage to the capital value or income generating value of the property. Whether this is appropriate will depend on all the circumstances of the case;
- (viii) as the tort of private nuisance also protects a person's property rights under the Constitution, general damages should not be assessed in a manner that

would be discriminatory or produce unjust results in the context of persons who experience similar or equivalent levels of discomfort, inconvenience or distress as a result of a nuisance. Every person is entitled to the ordinary use, enjoyment and comfort of their home irrespective of the value of the property and general damages for nuisance should seek to reflect that entitlement equally. For example, a plaintiff whose enjoyment of his garden is disrupted by a noise nuisance from a nearby factory should not be treated substantially differently in the measurement of general damages to his neighbour who suffers the same nuisance, but who may happen to have a considerably more valuable garden.

316. Here the full effect of the interference is described above. It has been substantial for a period of twelve years from May 2013. While I am not minded, for the reasons set out earlier, to assess damages based on the notional impact on the capital value of the plaintiffs' property, the defendants' valuer has estimated that the effect of the nuisance as having a substantial effect, is in the order of €150,000. Using the defendants' approach, the amount would be €394,000.00 based on the plaintiffs' valuers opinion. The defendants accept therefore, that based on the principles as they see them (and they did not suggest those principles were in anyway irrational) that a sum in the range of the valuers' estimates would be "fair". In addition, the conduct of the defendants has been such as to allow the nuisance to continue for many years. This adds to the reasons for assessing the damages for each plaintiff based on an amount that reflects the duration of the nuisance and this is most straightforwardly done by an appropriate amount for each year of the interference. The nature of the interference has been described by the experts as "extreme", "one of the worst cases" and "an outlier". Both sides submitted that the court should not have regard to amounts awarded for personal injuries claims. Neither side wished to submit a figure for general damages and there are few enough precedents for this scenario and such precedents as exist are obviously very different. The amount of general damages awarded in *Patterson* for approximately six months noise nuisance in 1978 was IR£500 for each plaintiff (equivalent to €3,855 today according to the CSO inflation calculator, or €7,710 for a year – but a considerably higher sum if the inflation is tracked to property inflation). In Australia in *Uren*, decided in March 2022, each plaintiff was awarded the sum of AUD\$12,000 (equivalent to €7,618 today) per year for noise nuisance from a nearby wind farm. Although that sum was then doubled for each plaintiff, due to the aggravation.
317. The level of interference in this case was extreme and therefore must be at the serious end of any appropriate range of damages. The interference seriously disrupted each plaintiffs ability to enjoy their home, their place of rest and relaxation, a place which they enjoyed with their children and their own parents, a place from which they did not feel they could or wish to move from, a place where they both also worked. The level of interference tested

their resilience, their reserves and their ability to cope. This level of interference was objectively supported by independent experts and recorded sound data. The nature of the noise, in particular the amplitude modulation and low frequency tonal noise, regularly passed limits recognised internationally as being the limit of what is considered tolerable. The behaviour and response of the plaintiffs was reasonable, patient and one which was seeking to engage with the defendants and the local authority to achieve a solution. The general response of the defendants was exceedingly poor. While they admitted liability during this trial, for twelve years they avoided engaging properly or substantively with the plaintiffs' complaints. Accordingly, taking all of the foregoing into account, and taking account of the different level of effect on each plaintiff and allowing for the fact that both sides experts viewed the case as "extreme" and an "outlier", I propose to measure the general damages per year for Mr. Byrne at €10,000.00 and at €15,000.00 for Ms. Moorhead. This means that Mr. Byrne will be awarded general damages to date for the nuisance in the sum of €120,000.00 and Ms. Moorhead's award is €180,000.00.

Stigma Damages

318. I do not propose to make an award of stigma damages or some additional award for a notional impact on the capital value of the property. For the reasons set out below, I propose to grant a full injunction directing the shutdown of the three turbines at all times. The defendants had in any event also indicated that they would implement a full adjustment of the software controlling the three turbines to remove the problem of shadow flicker. Therefore, there will be no ongoing nuisance. Such noise as emanates from the fourth turbine, near the three turbines complained of, does not generate enough noise to constitute a nuisance, based on the evidence of Mr. Meyer and, in addition and consequently, the plaintiffs do not seek and have not sought an order in relation to this turbine. There is therefore an operating wind farm nearby. It will have three remaining turbines that are not affected by the Court Order. While Mr. O'Regan gave evidence that in his opinion the house would still, even in this scenario, suffer a damage to its capital value, which was called a stigma damage, I am not persuaded that the weight of his evidence on this point was sufficient to satisfy me of this. Firstly, he had no examples of it actually happening. Second, he equated it to what he called a "haunted house" syndrome. In that regard, he may well be correct that there could be some future purchaser of this house (if and when it might ever be on the market) who will discount their offer based on the noise nuisance history (even though it will be fully abated by the result of this action) but that is not, in itself, sufficient to ground an award of damages. In my view it is too speculative. In that regard on Day 18 (page 22 at line 14) Mr. O'Regan in his direct evidence said in response to a question about the value of the house even if the turbines are "turned off completely", answered "*I would put it akin to – I mean, it might be – I don't know, I have no proof of this, but I would compare it to maybe a haunted house*". Mr. Corr the defendants' expert, did not agree with this. Mr. O'Regan's view was that the house might be worth €650,000 rather than €844,000 due to this stigma damage. I am not persuaded of this for the

foregoing reasons. It is too speculative and is lacking in supportive examples. In addition, there is a sense in which it would not be reasonable to impose such damages on the defendants where the nuisance, as a result of the orders made, will have been fully abated.

319. Finally, if I am wrong in this approach of not following the defendants submissions that the damages to date should be assessed based on the notional damage to the capital value of the house, and if the defendants submissions (based on the English cases discussed above) are correct, then I propose to indicate how I would have resolved the factual dispute between the two valuers, Mr. O'Regan for the plaintiffs and Mr. Corr for the defendants.

320. As indicated earlier, Mr. O'Regan assessed the notional impact on the capital value of the house at €394,000.00 (€844,000 less a remaining value of €450,000). Mr. Corr assessed the noise impact at between 13-18%, being a range of between €109,720 and €151,920 (this range has a midpoint of €130,820). Overall, I was slightly more persuaded of the evidence of the plaintiffs' valuer on this point. He had extensive and substantial experience of buying and selling properties for many decades. On the other hand, Mr. Corr's approach was more research and academic based. In each case, both expert opinions were in themselves estimates without many examples. In addition, Mr. Corr had initially significantly underestimated the degree of impact and his revision (based on a review of the actual evidence) indicates that overall Mr. O'Regan's view that the impact was serious is correct. Overall, therefore Mr. O'Regan had substantially more experience of working in the residential property market, his approach to valuation was more rooted in real life experiences of sales, Mr. Corr's approach was more academic and research based, Mr. Corr's revised valuation indicates that Mr. O'Regan's view and approach was more correct. While reaching a figure in these circumstances involves some degree of estimation I would have estimated the impact on the capital value of the plaintiffs' property as more probably a little closer to the estimate put forward by the plaintiffs' expert for the foregoing reasons and I would have awarded a sum of €275,000. Based on the approach contended for by the defendants, this sum would then be the entirety of the award to the plaintiffs jointly between them for the nuisance to date, as opposed to the plaintiffs each getting a separate award; see *Hunter and Dobson*.

(2) *The constitutional claims pursuant to Articles 40.3 and 40.5 of the Constitution*

321. Applying the dicta of O'Donnell J. (as he then was) in the Supreme Court in *Clarke* I am satisfied that the overarching consideration with respect to this issue is first to consider whether or not the common law tort of nuisance is in some way deficient. As O'Donnell J. states "*It is only if it can be shown that the existing law does not adequately protect the constitutional rights of the citizen that a separate claim for breach of constitutional rights can be invoked.*"

322. That consideration is made in a context where, based on the legal principles described earlier in Section X, the conduct of the defendants on its face engages with the plaintiffs' Article 40.3 and 40.5 rights. The admitted nuisance amounted to a substantial interference for a protracted period with the ability of the plaintiffs to enjoy the ordinary use of their home and in a manner which caused them substantial annoyance, discomfort, inconvenience and mental distress. In addition, the nature of this interference and its level of severity, as attested to by the experts and as supported independently by the recordings and data collected by the experts, reaches the level of severity to fall within the scope of Article 8 of the ECHR; see the discussion in the context of environmental nuisances in *Verein Klimasenioren Schweiz* decision of ECtHR. It also, for similar reasons, would appear therefore to engage the plaintiffs' Article 40.5 rights. The tort of nuisance is designed to protect a person's property rights and the admitted nuisance here unquestionably engages the plaintiffs' Article 40.3 property rights.
323. However, I am satisfied that the existing law of the tort of nuisance is adequate to protect the plaintiffs' constitutional rights in this scenario. As explained above, I have decided that the appropriate way to compensate the plaintiffs for the effect of the nuisance to date is by means of an award of general damages that reflects the effect of the nuisance on each plaintiff in a meaningful way and that takes account of the duration of the nuisance, the nature of it and the context in which it occurred.
324. This approach is, for the reasons explained above, consistent with the Irish authorities to date on the matter, albeit that part of the reasoning therein, in particular for not following the approach indicated by the English authorities, is informed by an understanding that the rights protected here are constitutional rights, including pursuant to Article 40.5.
325. In addition, for the reasons more fully described hereunder, I am satisfied that the established principles that govern the discretion of the court to consider awarding damages for a future nuisance, rather than granting a full injunction, are also adequate to protect the plaintiffs' constitutional rights. Again, for the reasons explained below, part of that reasoning is informed by an understanding that the rights protected here are constitutional rights. Accordingly, I do not propose to make any separate finding or grant any specific relief for a breach of constitutional rights.

(3) *Whether to grant a full injunction or a partial injunction and award damages for an ongoing nuisance*

326. The plaintiffs explained how they wish to stay in their home irrespective of the outcome of the case.

327. As described above in Section X, the authorities (see for example Lord MacNaughton in *Colls* and Neuberger P. in *Lawrence*) make it clear that a court can consider whether or not a defendant who requests to pay damages for an ongoing nuisance to avoid an injunction has acted in a neighbourly spirit. Lord Leggatt in *Fearn*, called it the “concept of reciprocity”, stating at para. 34:

"The underlying justification for those 'well-settled' tests was spelt out by Lord Millett in Southwark when he explained ([1999] 4 AER 449 at 464) that:

"The governing principle is good neighbourliness and this involves reciprocity. A landowner must have the same consideration for his neighbours as he would expect his neighbour to show for him."

328. This is relatively uncontroversial. For example, in *Larkin v Joosub* [2007] 1 IR 521, Finlay Geoghegan J. held that the owner of a neighbouring property owed a duty to his neighbour to take reasonable care to prevent his property becoming dangerous or a nuisance, to carry out periodic inspections and repairs as necessary and was liable for a nuisance once aware of it and had a duty to bring a nuisance to end or would otherwise be liable for the continuance of the nuisance.

329. This duty to act in a neighbourly spirit or to have regard to the concept of “reciprocity” (in the context of seeking permission to pay damages in lieu of stopping an ongoing nuisance – not in the context of any liability analysis) would seem in practice to reasonably involve taking account of the following factors in a case such as this:

- i. it would involve the putative defendant, on receipt of a complaint, engaging with the person who has made the complaint and investigating whether the complaint has any substance;
- ii. the next initial stage would involve, if the complaint appears to be genuine and to have some substance, some initial engagement on reasonable steps that can be taken, that may, during this initial phase, not be unduly burdensome, to address the concerns of the neighbour;
- iii. finally, if the full investigation of the complaint leads to a conclusion that there is substance to the complaint, then the putative defendant should wholeheartedly engage in efforts to mitigate the nuisance complained of, informing and collaborating with the plaintiff in an effort to ensure that any steps taken to ameliorate the nuisance and/or to mitigate the problem are seen to be effective.

330. The assertion by Mr. Spicer that as far as he was aware the gearboxes were being maintained was wholly lacking in detail and he had no direct knowledge at all as to what condition the machines or gearboxes were in. While Mr. Meyer explained that the noise could be reduced by curtailing the speed of the blades in certain conditions and or by making adjustments to the gearbox the only curtailment option put forward by the defendant was the complete switching off of the turbines.
331. As set out in more detail in the analysis of the evidence relating to the potential to mitigate the WTN by measures other than shutting down the machines (see Section VI above), the evidence demonstrates that during 2019 (when the defendants were facing an Enforcement Notice from the Council) they had been in touch with the turbine manufacturers Nordex who had indicated:-
- a willingness to engage in relation to developing a potential "*mitigation plan*";
 - a clear awareness of the potential issue of "*tonal noise*" (which was not something that was related to the planning permission or its conditions);
 - an indication that the machines had different "*noise power modes available*" already on the machines;
 - an indication of retrofits involving softer elastomer bearings with which Nordex had already "*had success with*" but which would have some costs if replacements were required; and
 - a request for "*noise studies carried out*".
332. The evidence indicates that despite this engagement from Nordex, the defendants decided not to pursue *any* of these options. Nor did they give any explanation for why they did nothing in this regard.
333. The evidence from Mr. Meyer indicates that there were a range of potential solutions to address the concerns such as those being raised by the plaintiffs. Some of the proposed measures involved dealing with the gearbox, the generator and the rotor blades and could involve potentially making upgrades and adjustments to the machines and some involved potential adjustments to the software operating the machines. However, the defendants did not indicate any willingness to carry out such a process and the only curtailment option offered by them was the shutting down of the machines during nighttime and in the mornings at weekends, but otherwise operating the machines as they are currently operating and paying damages for this ongoing future nuisance.

334. The stark reality of the evidence in this case is that if the defendants had approached the plaintiffs' complaints in a wholehearted neighbourly manner and if they had engaged with them in a substantive way, then the evidence described above in Section VI indicates that within a period of year to fifteen months, many of the problems identified could have been substantially addressed, or at least significantly ameliorated.
335. While the evidence indicates that some cost and effort would have been required to this approach, it is quite conceivable that even if all of the complaints of the plaintiffs had not been fully addressed, they may not even have embarked on this High Court litigation in the event of genuine and substantial engagement and significant amelioration of the WTN problem. The course of the correspondence and the patience of the plaintiffs indicates that they were willing to afford a significant amount of time to trying to achieve a practical resolution of the problem.
336. Even if a claim was initiated following such a process and if the problems had been addressed by the type of process or measures identified in Mr. Meyer's report of 20 March 2025, then any claim for damages for nuisance would have been limited in time to a period of approximately 15 months, which would, based on my assessment of the appropriate measure of damages have meant that this case could comfortably have been dealt with in the Circuit Court, indeed each individual case could on its own probably have come within the jurisdiction of the District Court on the basis of some amelioration working well within the 15 month time period estimated by Mr. Meyer.
337. In *Fearn* (discussed above in detail in Section X), Lord Leggatt had described a series of questions that could usefully be considered by the trial court when weighing whether to award an injunction or damages *in lieu*, in respect of a future nuisance. In deciding to remit the matter to the High Court, Lord Leggatt stated as follows at para 132 of *Fearn*:

"In the circumstances, if the parties cannot reach agreement on a solution, a further hearing will be required to address the question of remedy which should take place before a judge of the Chancery Division. Without constraining the matters on which the court may choose to hear argument, they may need to include:-

(i) whether there is a public interest in maintaining the gallery with a 360° view capable of overriding the claimants' prima facie remedy of an injunction;

(ii) whether any remedial measures which the Tate may propose are sufficient to avoid an injunction or damages;

(iii) the scope of any injunction; and

(iv) questions of quantification of any award of damages."

338. The above guidance from Leggatt J. is useful as an approach to consider to this issue in this case. As it happens there was sufficient evidence adduced in this case to enable this issue to be analysed in the context of similar questions.
339. Firstly, as to the question of whether the public interest can be considered in the context of remedy, I am satisfied that it can. Humphreys J. in *Coolglass* admirably sets out the critical legal and environmental considerations that underpin the public interest in the State reaching its legal targets for the production of energy from renewable sources.
340. I also accept, for the purposes of this analysis, that the common law principles contained in the law of tort (in this particular regard in the context of the discretion of the court to award damages in lieu of an injunction where liability for a nuisance has been established) and section 2 of Lord Cairns Act (which refers to the discretion), merit being considered having regard to Ireland's EU legal obligations in relation to climate change. Equally, this must be balanced with a consideration of the expert evidence in this case, that a failure on the part of developers to engage with concerns about the impact of WTN represents a threat to the development of renewable energy and therefore, rewarding that lack of engagement, is, on the evidence in this case potentially a threat to the roll-out of wind energy.
341. In addition it must be remembered that, as explained by Kenny J. in *Cullen v Cullen* [1962] IR 268, Lord Cairns Act was not intended to turn the Court into a body that legalised wrongdoing and that the discretion, without laying down precise rules should only be exercised in exceptional cases. Kenny J. states in *Cullen* at p286:

*"The effect of Lord Cairns's Act was explained by Lindley L.J. in *Shelfer v. City of London Electric Lighting Co.*(4).He said:—"The jurisdiction to give damages instead of an injunction is in words given in all cases . . . but in exercising the jurisdiction thus given attention ought to be paid to well settled principles; and ever since Lord Cairns's Act was passed the Court of Chancery has repudiated the notion that the Legislature intended to turn that Court into a tribunal for legalising wrongful acts; or in other words, the Court has always protested against the notion that it ought to allow a wrong to continue simply because the wrongdoer is able and willing to pay for the injury he may inflict. Neither has the circumstance that the wrongdoer is in some sense a public benefactor . . . ever been considered a sufficient, reason for refusing to protect by injunction an individual whose rights are being persistently*

infringed . . . Lord Cairns's Act was not passed in order to supersede legislation for public purposes, but to enable the Court of Chancery to administer justice between litigants more effectually than it could before the Act . . . Without denying the jurisdiction to award damages instead of an injunction, even in cases of continuing actionable nuisances, such jurisdiction ought not to be exercised in such cases except under very exceptional circumstances. I will not attempt to specify them, or to lay down rules for the exercise of judicial discretion."

342. The position is also succinctly addressed by Egan in *Webster (No.1)* where she states at para 42:-

"Although a plaintiff who establishes nuisance has a prima facie right to an injunction such that the defendant bears the legal burden of demonstrating that damages rather than an injunction is an appropriate remedy, the public interest must inevitably be a factor in the court's assessment of an appropriate remedy. At the very least it means that a generalised injunction ought not to be granted where a tailored injunction more suitable to the particular interference held to constitute nuisance is warranted."

343. The fact that Wexwind has a planning permission for a wind farm is also clearly relevant for the reasons discussed by Neuberger P. in *Lawrence*, discussed above in Section X..

344. Accordingly, I am satisfied that in general there is clearly a public interest in maintaining energy production from wind at the Gibbet Hill wind farm. An injunction for the full shutdown of three turbines will have some impact on that, albeit, it will be miniscule in the context of the overall levels of renewable energy being provided to the grid. It should also be noted that the wind farm does have to "dispatch down" energy at certain times due to the needs and / or capacity of the grid. The defendants only belatedly provided information to the Court about this, at the Court's request, and the information was relatively limited.

345. The defendants have chosen to only propose one remedial measure – that is the shutdown of the turbines at certain "sensitive" times. Despite the expert evidence indicating that other solutions are usually possible, and despite being given ample opportunity to do so, the defendants chose not to explore or put before the Court any solution to abate the nuisance other than the shutdown of the turbines, As will be recalled, when the defendants were facing an Enforcement Notice from the Council back in 2019 they briefly explored potential solutions with Nordex, the manufacturer of the turbines, but did nothing to progress these options.

346. The defendants' expert conceded that, based on the evidence before the Court, the only measure that would fully abate the nuisance would be the full shutdown of the three turbines in question.
347. The evidence before the Court is that if such an order is made, that this will likely lead to the insolvency of Wexwind. Mr. Spicer indicated that in those circumstances an insolvency appointee would likely sell the wind farm to a purchaser who could then operate the wind farm with the remaining three turbines. These have a valid planning permission until 2033 or a further permission.
348. The defendants accepted they could not meet the *Shelfer* tests (adopted and applied in *Patterson*, as discussed above in Section X) on the basis, inter alia, that they accepted that the injury to the plaintiffs was not small. However, I agree that this is not determinative and that compliance with the *Shelfer* criteria is but a factor in the Court's overall consideration of this issue (see *Kirwan* and Egan J. in *Webster (No.1)* referred to earlier). They did submit that Wexwind would be insolvent if an order for the full shutdown of the three turbines was made but Mr. Spicer indicated that an administrator / liquidator would presumably sell the wind farm with the remaining three turbines to a new operator. It was not suggested that Wexwind had any employees or that anyone's livelihood would be affected.
349. In addition, while there is a planning permission for the facility and while the land zoning supports the use of this land for a wind farm, the expert evidence in this case and the evidence of the communications with Nordex, does not demonstrate that this facility could not be carried without causing the noise nuisance complained of; see the comments of Neuberger P. in *Lawrence* at para. 125, discussed above in Section X.
350. From the plaintiffs perspective, if the nuisance continues they will have to give serious consideration to selling their family home. It is a family home of longstanding and filled with decades of memories including of their children and parents. As Lord Mance observes in *Lawrence*, it is inevitably valued for reasons "independent of money". As will be seen in the paragraphs below, coming to a value for the damages for the future nuisance (which the court has elected to try to do on a provisional basis having heard the evidence) would not have been straightforward or indeed an entirely satisfactory task in this particular case. As Clarke J. (as he then was) observes in *AIB v Diamond* [2012] 3 IR 549 at 590 "[t]he mere fact that it may, therefore, be possible to put a value on property rights lost does not, of itself, mean that damages are necessarily an adequate remedy for the party concerned is

entitled to its property rights instead of their value". Even then, those comments were made in the context of the potential loss of a bank's property rights in its capital markets team, a scenario less likely to attract the comments of Lord Mance referred to above. To that extent, I am of the view that damages are not an adequate remedy for the plaintiffs in this case if a noise nuisance is allowed to continue into the future.

351. It is also clear that the plaintiffs are not guilty of any conduct that would disentitle them to an injunction. They were patient and measured in their approach to the problem and sought initially to engage with the defendants and then with the Council. They were patient with the process that ensued once the Council become involved. Their evidence was measured and supported objectively.
352. The conduct of the defendants on the other hand fails to meet most of the factors that might usually assist a defendant in securing the remedy of damages for a future nuisance in lieu of an injunction:-
- (i) they failed to engage substantially with the nuisance complaints for years and even after proceedings were threatened and issued;
 - (ii) they failed to investigate the complaints properly;
 - (iii) they failed to initiate any substantive review of the facility or the turbines or to investigate and explore solutions to the problems complained of by the plaintiffs (in circumstances where the expert evidence and the evidence that emerges from the correspondence between the defendants and Nordex indicates multiple potential solutions);
 - (iv) they failed to notify the plaintiffs in advance of the trial that they would seek such an approach from the Court;
 - (v) they called no engineering witness or expert with evidence to give to address potential solutions;
 - (vi) the only expert witness called by the defendants made no proposal for mitigation (other than the shutdown of the machines) despite the defendants being given the opportunity to submit additional evidence;
 - (vii) they made a proposal to pay for the future damage based on a modest assessment by an expert valuer of the 'notional capital damage' if the nuisance continued into the future;
 - (viii) they submitted no clear evidence of the actual revenues that would be generated by the facility if they were to be allowed continue the nuisance.

353. In other words, to paraphrase the *dicta* from the case law referred to earlier, they did not behave in a neighbourly way in relation to the problem and they violated the concept of reciprocity. The nature of their conduct in this respect is discussed in further detail in the context of the decision to award the plaintiffs aggravated damages hereunder and that analysis contributes to my reasoning here not to exercise the Court's discretion to award damages in lieu of an injunction to fully restrain the nuisance.
354. In that regard, it is no bar to the relief of damages in lieu, that the owner of the wind farm is a special purpose vehicle (SPV) company with one shareholder which is a Luxembourg Fund, represented by corporate advisors based elsewhere. It is equally no bar to the application of the Court's discretion (which includes considering whether the operator of the nuisance behaves in a neighbourly way) that the Wexford wind farm facility is unmanned, controlled by technicians in a control room in Germany and with invoicing and scheduling of services handled by a man sitting in an office in Cornelscourt. Any corporate structure, devised for efficiency or otherwise, is entitled to be treated the same as, say for example, a wind farm owned by a collective of local farmers. However, if the owners structure their operation in this way, they will not escape the scrutiny of their behaviour that the caselaw indicates, in particular the questions as to whether they have behaved in a neighbourly spirit. If that does not come naturally, then while that may be as a result of the way they have chosen to set their business up, it is not an inevitable feature of same. It was within their control to have responded to the situation that arose differently.
355. On the other hand, if the Court were to accede to the defendants' application to allow the nuisance to continue between 7am and 10pm on weekdays and between 11am and 10pm on weekends and public holidays, then the plaintiffs will continue to suffer an admitted substantial interference in the ordinary use and enjoyment of their home. The interference will likely occur daily and in nearly all wind conditions. It will regularly surpass levels of interference considered intolerable by objective international standards. The plaintiffs do not want to receive damages for this interference. Nor do they want to have to leave their home, for all the reasons described above in Sections III and IV. The effect of not getting a full injunction will therefore be significant and difficult to assess in damages.
356. Weighing all of the above, I am not satisfied that the primary card of the defendants, that their facility supports an important public goal of increasing the supply of energy generated from renewable sources to the national grid, is sufficient in this case to disentitle the plaintiffs to their *prima facie* right to an injunction to restrain the wrong. The public interest involved here is an important one, but so are the plaintiffs' rights relating to their own home. The Court will always endeavour to strike an appropriate balance and to do justice as between the parties, while taking account of the important public interest invoked by the defendants

here, but the factors identified by the jurisprudence place weight on all the circumstances and the conduct of the parties. It is not an impressive approach to fail to engage with responsibilities to neighbours and to then hope to pay money to continue a serious interference with a neighbour's enjoyment and ordinary use of their home by relying on the broad public interest in renewable energy, particularly when other options were, on the evidence, available.

357. Accordingly, I propose to accede to the plaintiffs' application and to grant an injunction for the full shutdown of the three turbines referred to as T3, T5 and T6 at the Gibbet Hill wind farm. For the avoidance of doubt and for the same reasons, there is equally no proper basis for coming up with some slightly increased partial injunction (for example up to lunchtime, or a shutdown for the entire weekend). Such options would not be appropriate for the same reasons as the specific proposal made by the defendants above has been rejected.
358. If I am wrong in the exercise of discretion described above, and if the appropriate outcome should have been to allow the nuisance to continue in the context of a partial shutdown of the turbines as proposed by the defendants, and to award damages to the plaintiffs for this future nuisance, then I would have assessed damages based on an approach designed to facilitate the plaintiffs selling their home, if they wished, and moving to a property of equivalent comfort and value.
359. Firstly, it should be noted that this is therefore a different approach to that adopted by me in assessing the general damages for the nuisance to date. Secondly, there was insufficient evidence in this case to consider the value to the defendants of the partial injunction; a consequence perhaps of the failure of the defendants to give any notice that they intended to seek this approach from the court; in breach of the stricture proposed by Neuberger P. in *Lawrence* at para. 149, referred to above in Section X. Therefore, the application of the approach suggested by Millett LJ in *Jaggard* and Neuberger P. in *Lawrence* at para. 128 (described above in Section X) is best left to another case where it fully arises.
360. In the context of a future ongoing nuisance the plaintiffs are, in my opinion, therefore entitled to have the matter assessed from the perspective of the notional capital damage to the property so that they have the option of considering selling the property without suffering a capital loss. Even this approach does not fully take account of the strong personal attachment to a family home of longstanding, and in that regard doing this exercise (even on a hypothetical basis, lest the exercise of discretion above be considered in error) brings into real focus the force of the concept of damages not being an "adequate remedy". In any event and pressing on with the exercise, without the presence of the wind farm the valuers

agreed that the plaintiffs' home would be worth €844,000.00. Based on the evidence of the plaintiffs' valuer, with the partial shutdown of the three turbines proposed by the defendants, then if the plaintiffs were to try and sell their home, he estimated that it would only be worth €450,000.00. Indeed, this was also his figure if the turbines remained on all the time. This would represent a drop in value of €394,000.00. On the other hand, the defendants' valuer, Mr. Corr felt that with the turbines operating fully the notional impact of the noise, without the shadow flicker, was between 12-17% of the value of the property, and with the partial shutdown "that would cut the noise component by about 50%" (Day 18, page 83, line 10) if the turbines were only operating partially, as proposed by the defendants. This would equate to a drop in value of between 6-8.5%, being a range of €50,640-€71,740 (having a midpoint of €61,190). The defendants proposed that this was the approach to be followed to assessing the damages for the future nuisance with a partial shutdown. These figures create a divergence in the view as to the notional impact on the capital value of the plaintiffs' home of a partial shutdown as between €394,000 on the plaintiffs' side and €61,190 on the defendants' side.

361. Overall, I would have preferred a figure closer to the estimate of the plaintiffs' expert on this issue for the following reasons. Mr. O'Regan had considerably more experience of buying and selling properties than the defendants' expert, who was not actually involved in buying or selling property at all. Mr. O'Regan's description of the likely impact on potential purchasers was more rooted in a real life set of experiences over decades, whereas as the defendants' expert had adopted a more academic and research-based approach to considering the impact of the noise nuisance on the likely sale price that might be obtained. Some of that research was based simply on proximity to wind farms as opposed to homes where the residents had actually experienced an objectively established and independently verified noise nuisance of a severe nature. In each case, the figures provided by the experts were necessarily rough estimates.
362. Accordingly, coming to a view as to the likely impact on the capital value of the plaintiffs' home in the event of a partial shutdown, also inevitably requires a degree of rough estimation. That, of course, is not a bar to the exercise. Damages in the present for wrongdoing to be committed in the future is, by definition, not perfect justice. However, the approach of the courts in these imperfect circumstances is to award an amount that is considered to be reasonable, proportionate and fair to both sides, and which is, in its assessment, reached in a manner which is reasoned, based on existing principles and which has a regard for analogous awards. While I prefer for these reasons a figure closer to that of the plaintiffs' valuer, I think, contrary to the view of the plaintiffs' expert on one point, some allowance has to be made for the partial shutdown of the turbines. The partial shutdown will undoubtedly reduce the nuisance. It would not be fair, not to reduce the capital impact accordingly. Ultimately, I would have assessed the likely impact on the capital

value of the plaintiffs' home in the event of a partial shutdown at €250,000. To that sum I would have added a further sum of €25,000.00 to allow for a period of time of potentially a year, during which an ongoing nuisance would be experienced, for the plaintiffs to find a home of equivalent standard. This figure of €275,000.00 would then have been awarded to the plaintiffs jointly as compensation for the future nuisance and would have been in addition to the figures for the general damages for the nuisance to date. I would not have proposed assessing damages based on a reinstatement basis as those figures would leave the plaintiffs with a house of equivalent standard but as a new build, whereas currently the plaintiffs' home is essentially twenty-six years old.

(4) *Aggravated Damages*

363. As can be seen from the summary description of the evidence in relation to the engagement as between the plaintiffs, the defendants and the local authority above in Section V, the level of engagement by the defendants was poor and it caused the plaintiffs additional upset and distress.
364. For example, Mr. Byrne explained that the defendants had filed a full defence without carrying out any substantive assessment of the noise nuisance complaint made by the plaintiffs. In addition, he also correctly drew attention to the fact that the defendants had not trialed, piloted or implemented any mitigation measures to address any of the issues raised by the plaintiffs since their complaints began in 2013. The defendants did not call evidence from any persons who had actually interacted directly with the plaintiffs.
365. The defendants only witness as to fact was Mr. Spicer who confirmed that he had no direct interactions with either of the plaintiffs. He endeavored to suggest that he believed the contents of correspondence that had passed to the plaintiffs was true and accurate but his evidence in this regard was generally lacking in specifics or detail. He was unable to give any significant evidence that substantially challenged the narrative of the plaintiffs that there had been a lack of engagement from the defendants. Indeed, when it was put to Mr. Spicer that he had refused to provide data to the sound engineer of the local authority who had requested it, he sought to suggest during the re-examination that he had done this but this evidence was inaccurate as he was referring to correspondence that preceded the particular request of the local authority.
366. Overall, I found Mr. Spicer to be a witness who did not appear to have been that involved and had a very limited role in making any decisions on behalf of the defendants. He made generalised statements about matters of which he appeared to know little and certainly had no detailed grasp of. He sought to give evidence about legislative climate change

requirements but as soon as he was asked any questions that fell outside of the prepared examination his answers were either incorrect or vague. Also, he was unable to give any detail as to the financing arrangements in relation to this wind farm. He could give no explanation as to whether the investment had been refinanced or why considerable financing appeared to be due in relation to the wind farm twelve years after its installation. He was unable to give any detail about the very considerable financial transfers being made each year of over €1,000,000.00 from Wexwind.

367. The evidence he endeavored to give in relation to the financial consequences of an injunction were hearsay and lacked detail or any real understanding of the underlying financial position. Indeed, when he was asked by the court as to whether provision had been made in the accounts of the first and second named defendants in relation to the case, he incorrectly stated without hesitation that provision had been made. The next day this was corrected but no explanation for this was given by Mr. Spicer, who was a director of the second named defendant and therefore should have had some familiarity with the accounts.
368. In fairness to Mr. Spicer, he was put forward by the defendants as the only witness as to fact and was tasked with dealing with many matters about which he appeared to be unfamiliar with. He knew very little about the level of engagement of the defendants with the plaintiffs and very little about the financial arrangements actually governing the wind farm. He also appeared to know very little about the climate change issues.
369. When he passed on requests from the local authority to the actual people in charge and in a position to make decisions, he did so in a relatively formalistic way and did not appear to engage in any meaningful way with those persons as to the actual decision being made, which in this regard was the decision to refuse to provide the data requested to the local authority.
370. By virtue of the continued failure of the defendants to engage in any meaningful or substantive way with the plaintiffs concerns and complaints an Updated Notice as to Damages was delivered on the 17 May 2021 on behalf of the plaintiffs. This Notice claimed aggravated and exemplary damages. In this Notice the plaintiffs asserted that by the continued operation of the Gibbet Hill wind farm the defendants were generating substantial revenue and also continued to generate nuisance in the form of noise, vibration and shadow flicker. It continued by claiming that the defendants continued to operate the wind farm notwithstanding their knowledge of the ongoing nuisance caused by the said operation. It also complained of their failure to mitigate the impact and pointed out that this was having an impact on the plaintiffs' constitutional rights. It further explained that because the

defendants had been notified of the plaintiffs' expert evidence that the defendants were aware of the position. The plaintiffs set out that they were claiming that the nuisance was continuing notwithstanding the ongoing protests of the plaintiffs and notwithstanding the defendants' awareness of the impact on the plaintiffs.

371. The defendants therefore have been on notice of the nature of this aspect of the claim and accordingly had ample opportunity to prepare a defence for this element of the case and to adduce any appropriate or relevant evidence to either demonstrate that they did not have the necessary knowledge that their actions were leading to the negative effects complained of or alternatively that they had some genuine or reasonable belief that what they were doing was not causing a nuisance.
372. The defendants failed to call any of the persons who had actually interacted directly with the plaintiffs. As explained above, Mr. Spicer was quite removed from the actual interactions that were taking place. It was also clear from the evidence that Mr. Spicer had no actual decision-making role in relation to any of the relevant matters relating to this litigation. The persons making the decisions chose not to give evidence. The persons who could have given evidence about the question of revenue or the "substantial revenue" as pleaded by the plaintiffs chose not to. In addition, Mr. Spicer, as the only factual witness put up by the defendants, was tendered in the knowledge that he would be left having to answer questions about this. In that context, Mr. Spicer did not dispute the analysis put to him in cross examination that in effect over €1million per year in the last four years was being paid out by the operating company Wexwind from the revenues being generated by the operation of the wind farm.
373. In addition, in relation to the nuisance, there was nothing new or surprising or outside the ambit of the pleaded case that emerged in the evidence given by the plaintiffs or their expert by the time the admission of liability for nuisance was made.
374. Even when liability was still an issue there was nothing in the cross-examination to suggest in any meaningful or substantive way that there was anything about the plaintiffs' evidence, as analysed by the defendants in advance of the trial, to suggest that there was any reasonable belief in an argument that the plaintiffs' likely evidence, or the examples given, or the details in their logs or diaries, were not substantially supported by the independent evidence and the recordings made by the experts.
375. In those circumstances I am satisfied that it is appropriate to make an award of aggravated damages. While there is an absence of explicit evidence that the defendants made a

conscious and deliberate decision to target profits while at the same time continuing the operation of their wind farm, their lack of engagement aggravated the sense of hurt and upset and distress suffered by each plaintiff.

376. The defendants were armed with the substantial results from the plaintiffs' experts. They knew what the view of the Council's independent expert was. They had been served with two different Enforcement Notices.
377. They had made a deliberate decision not to provide the Council's engineer with the necessary technical data. They had to be dragged "kicking and screaming" to co-operate with the Council's independent expert, according to Mr. McKeown. They had refused to provide the plaintiffs with the relevant technical data (until ordered by the court to do so). Their own expert had raised only technical objections. They knew that the plaintiffs had discovered that the business was returning substantial revenues all the while it was operating. They knew the nature of the case being made for both aggravated and, separately, exemplary damages. In the teeth of all this, they chose not to put forward any evidence from any actual decision maker to explain this behaviour. The one witness as to fact tendered conceded he had no direct interaction with either plaintiff ever. From his evidence it was clear he was not a decision maker in any real sense. Despite being given every opportunity to adduce additional evidence including to put forward meaningful proposals to mitigate the admitted noise nuisance the defendants failed to do so. They did not call evidence from an engineer, whether in-house, from Nordex or some independent engineer.
378. A defendant can of course seek to challenge the claims made for aggravated damages and exemplary damages. Where there is a real risk of proper inferences being drawn, they should do so by calling evidence from the persons who made the actual decisions. Those persons chose not to give evidence in this case even though on many days they were watching proceedings via the remote link from Germany.
379. In other words, the evidence overwhelmingly demonstrates that the defendants chose not to engage with the plaintiffs claim or to give it any serious or substantive consideration or to carry out any straightforward assessment of whether the plaintiffs claim had any substantive merits.
380. Here the defendants were benefiting from a business connected to the public electricity grid to which they were supplying energy generated from the renewable source of wind. They were making, based on the evidence, by any measure substantial revenues from doing so.

They had an unmanned facility. They were paying no serious heed to the complaints of the plaintiffs even though those complaints on any analysis had all the indicia of genuine and substantial complaints and were supported by an abundance of objective data and independent analysis.

381. As Mr. McKeown pointed out in his evidence on Day 14 engaging with the public and addressing legitimate concerns is essential to the goal of rolling out substantial wind energy. The conduct and approach of the defendants in this case represents a threat to the goal of developing wind farms and wind energy.
382. This evidence, which was not disputed by the defendants in this case, is also reflected in the comments of Egan J. in *Webster (No. 2)* at para 204: *"Devising appropriate measures to avoid WTN nuisance at the planning and development stage is clearly of critical importance to the achievement of the State's aim of substantially increasing renewable energy ... it is also critically important that turbine operators engage constructively with genuine WTN nuisance complaints and devise appropriate abatement measures"*.
383. As described in Section V above, Mr. McKeown gave evidence about the failure of the defendants to provide him with all the SCADA data. He also gave unchallenged evidence that the defendants level of cooperation was not satisfactory in that, for example, short term switch offs were all that the defendants ever offered, and he explained why this was not practical. His overall view was that the defendant *"had been dragged kicking and screaming to facilitate anything"*, Day 14, page 101, which was to be contrasted with other wind farms where *"things were sorted out with a phone call an e-mail or a cup of coffee"*.
384. Based on the evidence before the court the only sensible inference that can be drawn is that the defendants made a decision not to engage in any substantive or proper way with the claims being made by the plaintiffs and that this has aggravated the obvious distress suffered by the plaintiffs and significantly prolonged the duration of the nuisance. This therefore merits an award of aggravated damages.
385. In part, by virtue of the approach I have taken to assessing the general damages for the nuisance to date (by taking into account how long the nuisance has continued and measuring compensatory damages on a yearly basis), the defendants are paying a price for their own lack of engagement.

386. In addition, this lack of engagement (and the correlated failure of the defendants to develop mitigatory measures to ameliorate the noise nuisance) is also a significant factor in my decision not to allow the defendants to partly continue the nuisance and to accede to the plaintiffs' application for an injunction fully shutting down the relevant turbines.
387. In addition, general damages have been assessed on the basis that the evidence indicates that this case should be considered a severe and extreme one and they have been measured in a way to reflect the duration of the nuisance, which in part is a feature that is related to the underlying factors that contributes to the decision to award aggravated damages.
388. Therefore, I not inclined in this case to follow the approach of Richards J. in *Uren* who made an award of aggravated damages in the same amount as the total award of compensatory general damages.
389. Accordingly, taking account of the legal principles in relation to how to assess an award of aggravated damages I am of the view that the aggravated damages in this case should be measured at 20% of the award of compensatory damages. Therefore, the first named plaintiff will be awarded the additional sum of €24,000.00 and the second named plaintiff the additional sum of €36,000.00 by way of aggravated damages.

(5) Exemplary damages

390. Despite a detailed claim, with particulars, seeking exemplary damages having been delivered to the defendants, there was a surprising failure on the part of the defendants to meaningfully engage with this aspect of the case.
391. Notwithstanding this, I am overall, not satisfied that I can safely conclude that the defendants behaved the way they did out of a deliberate and conscious decision to violate the plaintiffs' rights.
392. The level of engagement was shallow. The complaints were not treated seriously. On the other hand, as Mr. Spicer explained, it may have been that the focus was, in truth, really on the planning issues. In that context while the defendants took a technical approach to engaging with the Council, they did ultimately succeed in fending the Council off with their technical objections.

393. The evidence does indicate a deliberate lack of cooperation with the local authority and does indicate that during the last four years that Wexwind was generating substantial revenues in excess of €1million to repay financing. The defendants also decided not to call evidence from any actual decision maker to answer the claim for exemplary damages.
394. In those circumstances, it may seem naïve not to conclude that this approach is highly indicative of the behaviour that is intended to be captured by the second category of scenario justifying exemplary damages identified by the House of Lords in *Rookes v Barnard* [1964] AC 1129 (discussed in *Conway*, referred to earlier).
395. It may well be that the defendants did not care about the effect that the actual operation of the wind farm was having on the plaintiffs and that this attitude arose in a context where substantial amounts of money were being paid by Wexwind, an SPV set up to own the wind farm on behalf of the Luxembourg Fund which in turn was put in place by the ultimate owners. If the defendants had any different story to tell they had the opportunity to do so at the trial.
396. Nonetheless, while these facts are consistent with (if not fully probative of) a decision made deliberately in a context where the return from the wind farm and the benefits of that return were considered too far outweigh the potential downside of having to engage with the plaintiffs' claim, I am not satisfied that they are sufficient proof to make an award of exemplary damages.
397. I that regard I take account of the jurisprudence that also indicates that exemplary damages are for exceptional cases and, in general, where the evidence demonstrates a deliberate and conscious violation of the plaintiffs' rights.
398. In addition, this conclusion is partly informed by my consideration that when the outcome of the case is looked at in the round, I am of the view that the order for the permanent shutdown of the three machines combined with the award of compensatory and aggravated damages is probably sufficient in this case to indicate that a failure to properly engage with substantial and bona fide complaints is to be deprecated.
399. Finally, in that overview, I have taken account of the manner in which the defendants behaved during the trial, including making an admission of liability in respect of the nuisance on Day 11, initiating a partial shutdown of the machines at nighttime on Day 12, and making an apology to the plaintiffs at the end of the hearing.

XII. CONCLUSION AND FORM OF ORDER

400. Accordingly I propose to award the first named plaintiff the sum of €120,000.00 by way of compensatory damages, together with the further sum of €24,000.00 by way of aggravated damages. The second named plaintiff is awarded the sum of €180,000.00 by way of compensatory damages, together with the further sum of €36,000.00 for aggravated damages. These sums are awarded as against each defendant jointly and severally.
401. In addition, the Court grants the plaintiffs an injunction against each defendant, their servants and agents, directing them to take all steps necessary to forthwith fully shutdown the three wind turbines at the Gibbet Hill wind farm, Co. Wexford known as T3, T5 and T6 and which heretofore have operated pursuant to a planning permission from Wexford County Council 2009/0266. I will then hear from the parties as to any further orders required and as to costs.