

## Submission on Green Paper: Towards a Sustainable Energy Future for Ireland

I wish to respond to Question 1 on page 21 of the Green Paper:

....what actions could be taken to further diversify the fuel mix for electricity generation.....?

The answer that must come fairly promptly to the mind of any unbiased observer is:

### **Consider nuclear**

In doing so, I suggest that the principal issues which arise are the following.

#### The statutory prohibition

The treatment of nuclear energy in the Green Paper is unconvincing, to say the least. A reader unfamiliar with Ireland would surely find most puzzling the juxtaposition, in page 12, of the statement, without supporting argument, that “the statutory prohibition on nuclear generation will be maintained”, with the very weak range of options set out in the following paragraphs for correcting Ireland’s extreme over-dependence on gas for electricity generation.

In page 56 some general comments are made about nuclear energy. They relate to issues which certainly would require to be addressed in evaluating any proposal to adopt nuclear energy, but do not remotely amount to a tenable basis for a statutory prohibition. Further, the absence of any mention of the climate-change implications of nuclear betrays a marked lack of balance. The statement that developments “in the UK and other EU Member States will be closely monitored” also sits rather oddly with the statutory prohibition: if we are ruling out nuclear power absolutely, why waste resources on monitoring what other countries are doing?

In reality, in circumstances where global warming is rapidly coming to be recognised as possibly the greatest threat that has ever confronted the planet, for any country to debar itself by legislation from the use of a major and widely-used source of energy which, whatever its perceived drawbacks, has the potential to avert a very large quantity of greenhouse gas emissions, must defy rational explanation.

#### Impact of public opinion

In fact, it is fairly clear that what drives the statutory ban on nuclear power in this country is popular antipathy to the technology, founded on, and fed by, our objection to nuclear installations in the UK, and most particularly Sellafield. This has led us to adopt nationally such an entrenched anti-nuclear position, that it now seems unthinkable that we would ever contemplate using nuclear power ourselves. It would indeed be cruelly ironic if ultimately the greatest detriment we suffered due to the existence of Sellafield were to be our self-exclusion from use of nuclear power, even in circumstances where it might be of substantial benefit to us.

What has happened is that through the strength, and of course considerable validity, of our opposition to Sellafield, as a country we have dug ourselves into a hole as far as the possibility of taking an unbiased and pragmatic view of the merits of nuclear energy is concerned. It is important now, at the very least, that we stop digging. This

means, in the first place, that we refrain from flaunting our statutory prohibition, by such as the gratuitous declarations, in pages 12 and 56 of the Green Paper, that we will be maintaining it.

Secondly, our national rhetoric needs to begin to show that we recognise a distinction between a nuclear fuel reprocessing plant, which Sellafield is, and nuclear-powered electricity generating stations (nuclear power plants). It is perhaps worth reflecting that, were it not for the reprocessing plant at Sellafield, with its discharge over the years of vast quantities of radioactive waste into the Irish Sea, and its long history of highly-publicised malfunctions, it is quite likely that the use of nuclear power in the UK would have impacted very little on the consciousness of this country. We need to begin to convey, in however low-key a manner, that while we continue to object strenuously to the operation of Sellafield, there are not necessarily as much grounds for objection to conventional nuclear power plants, especially those of modern, safer designs.

#### Nuclear: the essential pros and cons

It is not the aim of this submission to argue that Ireland should adopt nuclear power, but only to plead that the case for it should be open for discussion on its merits. Of course there are issues surrounding nuclear power in respect of safety, and disposal of waste. At a different level, its economic merits at any point in time, and technical suitability for the Irish electricity grid, have to be carefully assessed, side by side with its potential attractiveness in offering a large-scale source of baseload electricity supply with very low net emission of greenhouse gases. I would add that the fact that implementation of nuclear power has the disadvantage of involving a long lead time is not a good reason for delay in giving it due consideration, but rather the reverse.

On safety, before nuclear could be adopted here, the public would have to be substantially convinced that another Chernobyl, or any accident with significant off-site consequences, is virtually impossible with modern reactor designs. In respect of waste, it is clear that many people have a major philosophical difficulty with the creation of waste which can remain lethal for hundreds of thousands of years, however safely it is disposed of. What has to be considered in this connection is whether it is a worse legacy to future generations to leave radioactive waste stored deep in geologically stable rock formations, or to bequeath them a planet which, within the lifetime of children alive today, could be ravaged by hurricanes, floods and devastating droughts and heatwaves.

Our current national policy seems to be essentially to align ourselves with the segment of the environmental lobby which maintains that increased use of renewable energy, together with energy conservation measures, will be sufficient to avert the threat of climate change, without the need to utilise nuclear power. At best, nobody can be certain this is true. When the threat which exists is so serious, it has to be suggested that to reject *a priori* any one of the major weapons available to fight it is to gamble recklessly with the planet's future.

Of course, it is also true that what Ireland does is not going to materially influence climate change. For us, the penalty for taking the wrong option will be predominantly financial, in the shape of the increased cost of the extra quantities of fossil fuels we will use, and the cost of the additional carbon credits we will have to buy. Besides

this, there will be the cost to our reputation of being among the countries with higher levels of carbon emissions.

#### Recommendation

In the light of the above, I would suggest with respect that, in the proposed White Paper, the material on nuclear energy in the Green Paper should be replaced by a passage on the lines of the following:

“In Ireland, public opinion is strongly antagonistic to nuclear power, due largely to the long history of concerns about the discharge of radioactive waste from Sellafield into the Irish Sea, and the perceived risk to this country from an accident or terrorist attack at Sellafield or at other nuclear plants in the UK or elsewhere. This concern has fostered understandable anxiety about the safety and security of any nuclear plant which might be proposed for this country. The long-term safety of arrangements for the disposal of radioactive waste from such a plant would also be the subject of major concern.

These public concerns would have to be fully taken into account in any future consideration of the use of nuclear power in Ireland, in conjunction with exacting scrutiny of the safety of any proposed plant, and of arrangements for the management of the radioactive waste which would arise. In addition, the economic merits, and technical suitability for the Irish electricity grid, of the proposed plant, especially in respect of the size of unit proposed, would have to be carefully evaluated.

Subject to these substantial caveats, nuclear power would offer the important benefit of providing large-scale baseload generation of electricity with virtually no emission of greenhouse gases. For this reason, developments relating to nuclear generation in the UK and other EU Member States will be closely monitored over the coming period in terms of their implications for Ireland.”

I would suggest that presentation of the subject in these terms would yield two significant benefits. First, it would have far greater credibility than our present position, both nationally and internationally; second, it would reposition our policy, from being headed into something of a cul-de-sac as at present, to a standpoint of openness and pragmatism. In doing this, it would prepare the ground for what, in the critical energy/climate-change scenario which faces us, ought ideally to be happening, that is, the setting up by the Minister of an Expert Group to examine and report to him on the technical and economic merits or otherwise, taking climate-change considerations into account, of building a nuclear power plant in Ireland.

Tom O’Flaherty BE PhD CEng  
Irish member of Euratom Scientific and Technical Committee  
Former Chief Executive, RPII

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