

DÁIL ÉIREANN

AN COMHCHOISTE UM IOMPAR AGUS CUMARSÁID

JOINT COMMITTEE ON TRANSPORT AND COMMUNICATIONS

Dé Céadaoin, 4 Samhain 2015

Wednesday, 4 November 2015

The Joint Committee met at 9.30 a.m.

MEMBERS PRESENT:

Deputy Michael Colreavy,	Senator Terry Brennan,
Deputy Timmy Dooley,	Senator Paschal Mooney.
Deputy Michael Fitzmaurice,	
Deputy Tom Fleming,	
Deputy Seán Kenny,	
Deputy Helen McEntee,	
Deputy Michael Moynihan,	
Deputy Patrick O'Donovan,	

In attendance: Deputies Bernard J. Durkan, Martin Heydon and Senator Thomas Byrne.

DEPUTY JOHN O'MAHONY IN THE CHAIR.

The joint committee met in private session until 10. a.m.

Grid Link Project: EirGrid

Chairman: The purpose of today's meeting is to engage with representatives of EirGrid on the company's recent decision to deploy a new regional option for the Grid Link project. On behalf of the committee, I welcome Mr. Fintan Slye, chief executive officer; Ms Rosemary Steen, director of external affairs; Mr. John Fitzgerald, director of grid development; and Mr. Mark Norton, network planning manager.

I draw the attention of witnesses to the fact that by virtue of section 17(2)(l) of the Defamation Act 2009, witnesses are protected by absolute privilege in respect of their evidence to the committee. However, if they are directed by the committee to cease giving evidence on a particular matter and they continue to so do, they are entitled thereafter only to a qualified privilege in respect of their evidence. They are directed that only evidence connected with the subject matter of these proceedings is to be given and they are asked to respect the parliamentary practice to the effect that, where possible, they should not criticise or make charges against any person, persons or entity by name or in such a way as to make him, her or it identifiable. In addition, I advise witnesses that any submissions or opening statements they have given to the committee may be published on our website after the meeting.

Members are reminded of the long-standing parliamentary practice to the effect that they should not comment on, criticise or make charges against a person outside the Houses or an official either by name or in such a way as to make him or her identifiable. I invite Mr. Slye to make his opening statement.

Mr. Fintan Slye: I thank the Chairman and members for the invitation to appear before the committee this morning to outline our decision to pursue the regional option for the Grid Link project. I am joined, as the Chairman mentioned, by Ms Rosemary Steen, our director of external affairs; Mr. John Fitzgerald, director of grid development; and Mr. Mark Norton, network planning manager. In April, we presented to the committee specifically on the North-South interconnector, and we are pleased to be back today to update members on the Grid Link project.

In March we launched our draft strategy for Ireland's grid development and carried out a ten-week consultation process. The strategy looked at the changing technical and economic context for Ireland's electricity transmission system. It examined the energy challenges facing Ireland and identified the steps we need to take to develop a strong, secure transmission system for homes, farms and businesses across Ireland, so that the electricity grid is capable of providing for the energy needs of the country now and into the future. A key objective of the draft strategy was to ensure it aligned with, and supported, the broader economic policy landscape, including the Government's Action Plan for Jobs and IDA Ireland's regional development strategy. The draft strategy reflects the change in economic circumstances and where we as a country, an economy and a society are now. When first developed in 2008, Grid 25, as it was then named, which included plans for the Grid Link project, was designed to ensure the electricity grid would continue to support the Celtic tiger economy with its high economic and energy growth rates. The past five years have changed that reality. There has been demand reduction to the point where estimated demand levels for 2010 will not materialise until 2025 - a 15-year delay - and, even then, growth rates will be less than a third of the rates previously forecast.

In reviewing the way in which EirGrid develops the electricity grid on behalf of electricity customers, we committed to a number of core strategic pillars upon which our work would be based. First was a commitment to open engagement and inclusive consultation with local communities and stakeholders in our approach to network development; second, an undertaking that practical technology options will be considered for network development; and, third, a focus on optimising the existing network to minimise the need for new infrastructure. It is in this context that the draft strategy we brought forward included the new innovative regional option to deliver the Grid Link project. Previous strategies had looked at delivering the project via either a 400 kV overhead solution or a fully underground option delivered using high-voltage direct current, HVDC, technology.

In reviewing our grid strategy, we set about marrying existing and developing technology via an advanced technology called series compensation. This option would use the existing network and avoid the need for significant new overhead infrastructure. Following the publication of our draft strategy in March, and at my previous appearance before this committee in April, a number of Members, here and across the Oireachtas, expressed support for the adoption of series compensation to deliver the Grid Link project. In addition, the feedback from communities as part of our consultation on the draft grid development strategy was very favourable to the regional option. It is important to stress that series compensation is only possible for the Grid Link project due to the extensive transmission network in the Munster and Leinster region, more specifically the lines that run from Moneypoint in the west to Leinster and the wider eastern seaboard. Such a network is not available to us in the development of other major projects such as the North-South interconnector.

If we proceed with series compensation, EirGrid will be among the first transmission system operators, TSOs, in Europe to deploy it on the grid. It is a technology that enables more power to be transported on a transmission line, provided the underlying transmission network is strong enough to support it. We have carried out extensive analysis of the network in the area and determined that it is appropriate in this case. Coupling the deployment of this technology with a new cable across the Shannon and a series of line upratings across the south east will enable us to deliver a good solution for the area, which will negate the necessity for significant new overhead or underground infrastructure for the Grid Link project. As a technology, series compensation has been used over very long distances in some parts of the world, such as Brazil and California, but recent advances mean it is now suitable for use on smaller transmission systems like ours.

Questions have been posed as to why this technology was not put forward by EirGrid previously. Series compensation is not a new technology. However, it would not have addressed the need the Grid Link project was originally designed to address for any reasonable period of time. The key point here is that changing demand forecasts and a slower rate of growth than originally forecast, combined with advances in technology, mean the series compensation option now represents a viable solution to meet projected needs for the foreseeable future. In addition, series compensation has the benefit of offering significantly reduced costs to electricity consumers from the delivery of Grid Link. To deliver the project via overhead lines or through the underground option would have cost hundreds of millions, as has been previously set out. The series compensation option we have now committed to pursue will ensure the project is delivered in the most cost-effective manner available to us. We will ensure electricity costs to both businesses and homes are kept to a minimum by adopting this option.

The more detailed technical workings of series compensation were set out in the report pre-

sented to the independent expert panel in September and published last month on our website. Furthermore, this solution was peer reviewed by London Power Associates in the report published in March. However, my colleagues and I will be happy to provide detailed information to members today, or we can meet them at a later date to provide further detailed briefings as required. We welcome any questions members may have.

Chairman: Thank you, Mr. Slye. I now invite questions from members, beginning with Deputy Michael Moynihan.

Deputy Michael Moynihan: I welcome the delegates from EirGrid. There seems to have been a complete turnaround in respect of the company's previous plans, which included a Grid South and Grid West. Why did EirGrid opt for this change in direction? Mr. Slye indicated that the new grid strategy has been tested to ensure it can deliver power into communities for the foreseeable future. How accurate is that prediction? Given that the new projections are so out of kilter with those we were given in 2007, notwithstanding that the latter were based on Celtic tiger data, how confident can we be about the new forecasts?

In the past three or four years, there has been huge fear, anxiety and concern among communities in locations where pylons were to be installed. How can these communities be reassured this plan will not be resurrected in the next 12 months or in the next ten to 20 years? Has EirGrid new projections? Has it tested other technologies? Are these technologies foolproof? If the figures of 2007 were so wrong, how can we be assured they are right in 2015? How will EirGrid dispel the fears that there will be further attempts to install pylons in these communities? There needs to be clarity that the Grid West and Grid South projects are dead, so to speak. Does EirGrid have trust in the figure on which it is basing its projections? How much has this aborted project cost EirGrid and what was spent on advice and fees up to this point? Thousands of submissions were made against these proposals in 2013 and 2014 which were based on real concerns and anxieties. They were rubbished, for want of a better word, at the political level.

Given that the EirGrid figures for its projections were wrong in the past, why has it confidence in the current figures? How much money has been spent to date on the aborted EirGrid projects? Given that the agency is not proceeding with the other grid projects, is there money available to do a proper job and have an underground interconnector, given that it is now technically feasible to do a North-South underground interconnector and using the savings from other projects? By putting all the infrastructure underground EirGrid would be doing the correct thing by the communities in counties Cavan Monaghan and Meath.

With the permission of the Chair, I may ask further questions later.

Mr. Fintan Slye: I thank the Deputy for his questions and I will go through them in the order in which they were asked. First, the Deputy asked how sure EirGrid was of the data underpinning the figures for the adoption of the regional grid option. We have done extensive analysis on this. In addition to our own analysis, we commissioned Indecon to do a review of our analysis and to look at the economy sector by sector and region by region to see whether the plans we were putting forward would meet the needs of the regions for the foreseeable future. The Deputy asked what foreseeable future means. The horizon of the foreseeable future is out to 2025 to 2030. We published the review by Indecon in March and it is available on our website. We can discuss, if the Deputy so wishes, the data and figures in the report that looked at the south east and the adequacy of the regional solution to meet the needs of the network for that period. Given where the economy is and where we see the growth in the economy, which is great to see, the make-up of the economy is very different now from what it was before the

crash. Before the crash, construction made up a significant proportion of the GDP growth in the economy. I think we are all acutely aware that before the crash it accounted for more than 20% but now it is below 10%. What is driving economic growth today is very different. That in part is a reason the relationship between GDP growth and energy growth has changed. One no longer gets the close correlation we had in the years between 2000 and 2007 between GDP growth and energy growth. The make-up of the economy is different and cost competitiveness has become a significant focus for industry. Energy has become one of the areas where businesses have become acutely conscious of the need to manage their costs to ensure competitiveness. We only have to look at yesterday's announcement of the unfortunate closure of the Michelin plant in Ballymena to understand the impact of cost competitiveness on the sustainability of businesses. Businesses are much more conscious of managing energy costs.

We are seeing the new standards in housing coming through in the new housing stock, so the use of energy per unit of residential housing is not as good. For all those reasons growth rates in energy are now not as correlated with growth rates in GDP. We want to ensure any option we put forward is robust and the plans we put forward will meet the needs of society and the economy. At the end of the day, the transmission system is there to serve society and the economy and to ensure reasonable demands for electricity are met and the economy can grow. We underpinned our analysis with an analysis by Indecon which went through that in great detail and we published that as part of the draft grid development strategy in order that we would get feedback from anyone who believed we might have missed in any way anything in terms of economic growth. There was no feedback on any of it. In fact there were supportive statements from various relevant agencies around it.

The Deputy's second question was on the money spent to date. In developing the Grid Link project to the stage where it is now, with the three options developed and we are about to move forward with one option, the total expenditure to date on the project has been of the order of €12 million. This includes the development of the three options and the comparison of the three options to enable the regional option to be selected as the way to move forward.

I apologise to the Deputy if I took up his next question in the wrong way but what I have written down is whether we understood the real concerns that were raised in the submissions on the Grid Link project. There were of the order of 38,000 submissions made on the Grid Link project during the consultation period that ran from the end of 2013 into early 2014. We recognised the very real concerns in the communities. That was the very reason that in January we announced a series of five initiatives designed to address those concerns. That consultation closed in mid-January and before the end of the month we had announced a series of five specific initiatives based on a very high-level review of the themes we had seen coming through in that consultation and other consultation. We took an immediate step to try to address those because we recognised the concerns. Those initiatives included a commitment to undertake a detailed study of the undergrounding option in the cases of Grid West and Grid Link, to review our consultation and engagement process, to put in place a community gain scheme for communities, to address in a very explicit way concerns around the tourism, agriculture and equine industries and to work with the review of electromagnetic fields which is to be undertaken by the relevant Department.

Perhaps it is worth mentioning that during 2014, we undertook an extensive review of our consultation and engagement process. We engaged two external agencies to come in to help us with that. They went out to meet stakeholders, individuals and groups that had participated in consultation. They provided us with detailed reports and feedback, all of which we published

explicitly on our website. On foot of that process, in December of last year we set out a series of 12 commitments that we were making as a company in order to improve our consultation and engagement process. We are continuing to look at how we can improve that. It is fair to say that we listen to communities and try to respond. We have looked to improve the manner in which we consult and engage with communities. We are continuing to seek to do that as we go forward.

The Deputy's fourth question related to why we are not looking to put the North-South interconnector underground. He correctly referred to the last time we were in here, when we spoke about the North-South interconnector project. He pointed out that the technology to put it underground is available. I suppose the first thing to say is that the project in question is now the subject of a statutory planning process with An Bord Pleanála, to which we have made an application for consent. An Bord Pleanála has engaged in a process of statutory consultation and it is running through that process. Maybe that is the first thing to say. The second thing is that undergrounding comes at a very considerable additional cost. In 2011, the Government appointed an international expert, who reported to this committee in 2012. The expert's estimate of the additional cost was that it would represent an increase of a factor of three. We have done a detailed engineering, environmental, technical and cost assessment of a route-specific option for the North-South interconnector delivered using high-voltage direct current technology. We have identified a route, costed and assessed the feasibility of that route and determined through that detailed work that the cost of such a route would be in excess of four times the cost of the alternative option. All of that is published and available and forms part of our planning application, which has been submitted to An Bord Pleanála.

Deputy Michael Moynihan: I would like to make two points. Given that EirGrid got the planning of the Grid West and Grid Link projects so wrong, without putting a tooth on it, is it feasible at this stage to take another look at the North-South interconnector? I suggest that it should be reconsidered in light of what has transpired with the Grid West and Grid Link projects. EirGrid has spent €12 million on the Grid Link project to date. My assessment from the outset was that a group of engineers within EirGrid looked at this project as a means of getting power from point A to point B, without factoring in the human cost or the human issue in this regard. State funding of €12 million has been spent on a project that is now being shelved or postponed. People in the communities out there are wondering whether this project is gone forever. Mr. Slye has said that EirGrid is looking at figures for the period up to 2025 to 2030, which is a span of ten to 15 years. Are we looking at this project coming down the line again? Can Mr. Slye say at this point that EirGrid's current preferred option, with which it is proceeding in the cases of the Grid West and Grid Link projects, will suffice right into the foreseeable future in terms of making sure there is energy right around the country? Is this being done on the basis of all the scientific evidence that is available to EirGrid and all the best practice reports? Can we be assured that EirGrid will not come back and put fear into communities again in ten or 15 years' time? Is the technology advancing so much that EirGrid can do that? I suggest that it needs to dispel absolutely the doubt that persists out there. I will conclude by repeating my first supplementary question. Given that EirGrid got this so wrong, is it time to look at the North-South interconnector as well and make a decision on it that would be more amenable to the communities in Cavan, Monaghan and Meath?

Mr. Fintan Slye: The Deputy's first point related to the robustness and longevity of the regional option. As I have said, we have assessed that option against the demand for energy in the region that we can reasonably foresee. We are progressing with the regional option. We are not progressing with the 400 kV overhead line option. That option will not be progressed with.

We need to continually look at the evolution of demand and generation in the economy and in society. It may well be the case ten or 15 years from now that we need to do something else to reinforce the grid. We are continually reinforcing the grid. Maybe it is worth pointing out there are approximately 200 projects in Grid 25. We tend to talk about three of them, but there are 197 other projects that are under way. We are continually reinforcing and updating the transmission grid as required to meet the needs of society and the economy. We will continue to do that. I do not think it would be responsible of me to sit here and say that there will be no need to further reinforce the transmission network 20 or 30 years from now. However, I can say that the 400 kV overhead line option for Grid Link is dead. I can say categorically that we are not proceeding with it. We are proceeding with the regional option because we believe it meets the needs of the region and the economy for the foreseeable future. As I have said, I am using that term in the context of 2025 or 2030. We will continue to look at the demands of the economy and what society needs to ensure the transmission network is fit for purpose. To the extent that there might be anything additional that might need to be done in the future - I imagine that there would be as the economy and society continue to evolve - we will work with communities to do that in compliance with the new strategic pillars we have set out, which involve trying to maximise the use of the existing infrastructure, working in close co-operation and collaboration with the communities that are out there and minimising the need for new infrastructure. It will not be the case that we will dust off or resurrect the Grid Link 400 kV option. That would be inappropriate as time will have passed. It will not be possible to do that. I can say in response to the Deputy's request for me to be definitive about it that the Grid Link 400 kV overhead option will not be progressed with. We are progressing with the regional option.

Deputy Michael Moynihan: Will Mr. Slye accept that the 400 kV proposal was the wrong option and that EirGrid was wrong in what it was pursuing?

Chairman: I think we-----

Mr. Fintan Slye: Does the Chair want me to answer that?

Chairman: If we could finalise it, maybe, because there are other members waiting to come in.

Mr. Fintan Slye: I would say in response to the particular point made by Deputy Moynihan that this option was the correct solution in 2008, when the Grid 25 strategy was developed. The Grid Link project was part of that solution. The regional option, and the deployment of series compensation, would not work in the context of the levels of demand on the system and growth that were being seen on the system in 2008. We specifically looked at that. At the time, given the circumstances that existed, such as the economic position and the growth in demand, the Grid Link option, which involved a new transmission circuit, was the appropriate solution. The regional option that is now available to us quite simply would not have worked.

Chairman: Is the Deputy happy with that?

Deputy Michael Moynihan: Yes.

Deputy Helen McEntee: I thank the representatives from EirGrid for coming this morning and apologise for the fact that I was unable to attend the previous meeting. The fact that EirGrid has not been progressing with overhead power lines for the Grid Link or Grid West projects is viewed by myself and entire communities with amazement, bemusement and disgust at what seems to be a complete U-turn. I speak for the people of County Meath who are reasonable,

fair, very hard-working and progressive. Our county has changed dramatically in the last 20 years and we are realistic. We realise that change and development is necessary. However, people should be treated with a little respect. After eight years of public concerns and genuine fears being expressed, EirGrid has completely ignored the north east.

One of the first meetings I held when I became a Deputy two and a half years ago was attended by EirGrid and the North East Pylon Pressure, NEPP, group. Members of that group probably feel that they are in a time machine because EirGrid has simply dusted off its original plan. Apart from changing the height of the pylons, I would say that not even a comma has been removed from the initial plan that was put forward. EirGrid launched a document recently entitled Your Grid, Your Views, Your Tomorrow, upgrading Grid 25. It is a nice, shiny new document but there is nothing new in it in the context of the North-South interconnector, while Grid Link and Grid West are afforded other options, including underground lines. EirGrid has never afforded the people of Meath, Cavan or Monaghan the same options. The witnesses are before this committee today to discuss EirGrid's new, innovative plans but they will have to forgive me for not jumping for joy or doing cartwheels when the people of Meath have never been given other options. I do not know if the witnesses have met many people from Castle-town, Carlanstown or Kilmainhamwood. If they have watched any football games involving the county, they will know that the people of Meath do not roll over. We have not been treated fairly but we expect to be. I need to say that because this has gone on for so long and people have not been treated fairly.

I have a number of questions for the witnesses. They said that Grid 25 was designed to ensure that the electricity grid will continue to support the Celtic tiger economy but that the last five years have changed that reality. For the past four years, EirGrid has continuously stated that there was an absolute requirement to achieve the Grid Link project, involving the erection of 750 pylons. Yet, in the space of one year, the company has managed to do a complete U-turn. A planning application, identical to the one that was lodged five years ago was lodged with An Bord Pleanála this year for the North-South interconnector. That does not reflect the opening statement or the changed environment to which the witnesses have referred. Why is that the case?

The witnesses spoke about new, innovative options but many would disagree with the assertion that the strategy for Grid Link is either new or innovative. Why have new options not been put forward for North-South interconnector? Why has nothing else been put forward? Why are there no regional options for the north-east region? The witnesses cannot tell me that there are no other options; there are definitely other options.

The witnesses also spoke about the cost effectiveness of the new project and that it would cost hundreds of millions of euro were the company to go ahead with the underground option. Surely if hundreds of millions of euro will be saved, which is what the opening statement implies, then that money could be redirected and used for the undergrounding of the North-South interconnector because we now know that this is possible.

Finally, the witnesses referred to open engagement and inclusive consultation with local communities on all practical technological options but I would argue that EirGrid has not engaged with the people of north Meath. It has not been able to provide a detailed costing for undergrounding because its representatives have not been let onto the land. If the company has not been on the land, how can it carry out the study that would be needed in order to put forward an accurate assessment?

Mr. Fintan Slye: First of all, before getting into individual questions I wish to make something clear. On the Grid West project, we looked at various options to deliver it overhead and underground, in line with the terms of reference set out by the independent expert panel chaired by Ms Justice Catherine McGuinness. We published the detailed assessment of both overhead and underground options earlier this year. We have engaged with some people in the local community on questions they raised. We have not progressed it further as we are awaiting the outcome of planning applications by some of the wind developers in the area that are in train. Members are probably aware that one of the wind farms that was to be developed by Coillte, the Cluddaun wind farm in north Mayo, was refused planning permission. The Oweninny development has been granted planning permission but the developers are looking to amend that permission. We have sought clarity from the developers. Obviously, we must await the outcome of their planning permission application before we can proceed with the project, in terms of the option that is most appropriate. In effect, the project is on hold pending clarification from the generation developers. The developers need to have clarity around the process they are undergoing with An Bord Pleanála. The situation is very different to that pertaining to Grid Link. While I am happy to answer questions on both, I am just pointing out that they are different and we should not conflate them.

Deputy Helen McEntee: Are there not underground options for Grid West?

Mr. Fintan Slye: For Grid West we have a fully underground option as well as overhead options. The Deputy is correct in that regard.

The Deputy asked why we have changed Grid Link now. Grid 25 was initiated in the context of the 2007-2008 grid development strategy. We obviously reviewed the project at each stage and published those reviews as part of the various consultations that we carried out. The drop-off in electricity demand did not happen in 2007 or 2008. It did not actually happen until 2010-2011. The demand curve is set out in the grid development strategy to which the Deputy referred, namely the Your Grid, Your Views, Your Tomorrow document. We have included both the historical and projected demand growth figures in that document and members will see that it was not until a significant period after the economy went through such a shuddering that demand fell. We continually review the project.

I referred earlier to the specific commitment we made to make a side-by-side comparison between the underground and overhead options at the start of 2014. That, coupled with the review of the overall grid development strategy, allowed us to identify the regional grid option and the use of serious compensation which, with advances in control systems technology, allow it be deployed on smaller transmission system than the thousands of kilometres that it had previously been used on in other parts of the world. Those advances in technology, coupled with the fact that the demand had declined in real terms and that there was a shift in the make-up of the economy, allowed us to identify that as an option and to progress it and bring it forward. It would not have worked in the context of the high growth rates of previous years.

In the context of the North-South interconnector, the Deputy asked two questions. The first was why the regional option will not work for that project. The regional option involves maximising the utilisation of an underlying mesh transmission network. It involves pushing more power through a mesh transmission network by deploying the newer technology on some of the transmission lines. In the context of addressing the need to transfer power between the Munster region and the Leinster region, broadly speaking, there is an extensive mesh transmission network that has been built up there since 1927 which can be utilised. In the case of a North-South interconnector project, however, two transmission grids were developed separately over time in

Northern Ireland and the Republic of Ireland. These are currently joined by a single interconnector. Quite simply, there is no underlying mesh transmission network that can be maximised. In other words, the network on which we might deploy this technology in order to allow it to work just does not exist.

Deputy McEntee commented on the extent of the examination of the underground option for the North-South project. I referred earlier to the fact the Government appointed an international expert commission to review the project and that this commission submitted its report in 2012. We did an extensive analysis on a specific route, a detailed technical, environmental and economic analysis, which we also published. Further to that, the then Minister, Deputy Rabbitte, requested that the independent expert panel, which he had appointed, chaired by Ms Catherine McGuinness, the retired Supreme Court judge, would look at all of the work that had been done on the North-South project, in terms of the assessment of the various options and provide an opinion as to whether the work was consistent and comparable to the level of detail of an examination of options which was then being requested for Grid West and Grid Link. In the middle of last year, the expert panel issued a statement indicating that in all material respects the analysis had been done for the North-South project. A comparable analysis of an overhead and underground option was published on 1 July last year. We have looked extensively at alternative options for the North-South interconnector project. We have published them and made them available. They also form part of the planning application file that has been submitted to An Bord Pleanála.

Deputy McEntee asked whether the money saved by the deployment of a regional option for Grid Link, which is a lower cost solution than either an overhead or an underground option, could be diverted to an underground option for the North-South project. We examine each project and have to make a decision based on Government policy and the specific needs involved. To spend hundreds of million of electricity consumers' money on putting the infrastructure underground does not seem to be the appropriate answer. This is also supported by the regulators, North and South, who have been quite clear in their views on the appropriateness or not of incurring the additional cost associated with an underground project. Recently, the Northern Ireland regulator was explicit on the urgency of the project, the need to get it through and the fact that the overhead option was the only realistic one.

The Deputy's final question was on consultation and engagement with people on the North-South project. We have made considerable efforts to try to continually improve how we consult and engage with communities. We recognise that delivering transmission infrastructure which benefits the entire State and all electricity consumers but impacts more directly upon a smaller group that hosts the infrastructure is a difficult prospect. We are always considering ways in which we can improve how we consult and engage with affected communities. We recently appointed agriculture liaison officers, some of whom are in the Gallery, to specifically try to engage with communities located along the route. We understand that these are very real issues for people who are concerned about the impact of the project. We are committed to trying to work through the issues and to address them where it is possible to do so.

Deputy Helen McEntee: Following the initial meeting two and a half years ago, the purpose of which was to move the project forward again, I would have thought there would have been some sort of consultation with people rather than their being informed that there is only one option. In 2010 and 2011 we were told the lights would go out if the project did not proceed but we now know that is not the case. There has not been a single change to the proposal for the North-South interconnector. While we talk about the different changes, it has never been

reflected in the North-South interconnector proposal. We all know there has to be progress. However, the company has been trying to bring forward the project for eight years and to say that something has been published on the back of a report that is probably 500 pages long and expect people in counties Meath, Cavan and Monaghan to find that and understand what it says is ridiculous. If the company wants to move this project forward, it needs to be able to bring people with it and show that it has worked with them. To date, this has not happened.

Chairman: Does Deputy McEntee wish to put a question following that comment?

Deputy Helen McEntee: I will leave it at that.

Deputy Michael Colreavy: I welcome the witnesses and thank them for appearing before the joint committee. I reviewed the questions I asked on the previous occasion they appeared and I wish to indicate that I will be asking some of them again today.

I like to start from a point of agreement. I think we would all agree that every business, agency, politician and person on the island of Ireland wants adequate, reasonably costed, secure green energy now and into the future. After that, we seem to run into difficulties. It seems to me and many others that but for the massive public opposition to the overground Grid Link project, the rethink would not have happened. Massive public opposition and serious political concerns meant that a rethink happened and a solution was found, which solved many of the problems that were causing distress to people in the path of Grid Link. Let me say “Well done” to those people. Were it not for their opposition, an incorrect decision that would have led to an increased cost being incurred by the State and taxpayers would have been made.

I have a number of specific questions which I will put to the delegates before I deal with the lessons to be learned. One of the key lessons from the rethink on Grid Link is that people re-examined the forecast demand and came up with a realistic estimate of the projected demand for the next 15 to 20 years. Has that been done regarding the North-South interconnector? Are we dealing with reality when we talk about projected demand in the North-South interconnector scenario?

My second question is on the regional option or series compensation. Am I correct in believing that means that supply can be taken from a low demand area to be used in a high demand area? I do not know how it works so will somebody explain to me whether that involves taking supply from low demand areas and putting it into high demand areas?

My third specific question is about the series compensation or regional option. Does that facilitate integration with supply in Britain or on the European mainland in terms of future energy security? Does the technology support that integration?

The points I made at the last meeting lie at the heart of the North-South interconnector issue. I suspect that the witnesses believe that because something has gone to An Bord Pleanála the job is done and there is nothing people can do about it. When I asked questions at the last meeting such as whether the impact of over-grounding on house values, land values and tourism had been considered, the replies were to the effect that they looked at what happened elsewhere but it is subjective and difficult to put a measurable impact on it. Is that fair on the farmer who will have pylons on his or her land or whose house will be overlooked by pylons? Is it fair to the owners of hotels, guest houses, pubs and cafés who will see a reduction in the number of tourists coming into their areas and who depend on tourism in those areas? We need to be able to measure the impact of any developments. If there are adverse impacts from good develop-

ments, that reality has to be taken into account. Adverse impacts arising from good developments can happen. I was not satisfied with the answers I got on the last occasions so could we explore that issue this morning?

Mr. Fintan Slye: The Deputy's first question was on forecast demand. We publish annually forecast demand and generation, and that is done on an annual basis for the entire system. When we then look at individual projects it is broken down by the relevant area. To reassure the Deputy, the North-South issue has been reviewed in the context of the most up to date assumptions for demand growth that we have and tested against scenarios around that. All of that has been done.

Deputy Michael Colreavy: Is it a 15 year look forward?

Mr. Fintan Slye: We publish a ten year one. It is called the generation adequacy statement.

Mr. Mark Norton: Generation capacity statement.

Mr. Fintan Slye: Apologies; it is the generation capacity statement. That looks at projected demand separately North and South and on the island as a whole and also the availability of generation resources to meet that projected demand. It also identifies any security supply issues either on the island as a whole or within either jurisdiction, Northern Ireland or the Republic. That is an annual report. The format and content of it is stipulated by both the regulator and various European requirements to make it available. That is all available and if I may say it is a-----

Deputy Michael Colreavy: Why was EirGrid caught by surprise in regard to the Grid Link project? Was it a case of "Oops, we estimated too high"? Why was that surprise visited on EirGrid if it does an annual plan?

Mr. Fintan Slye: The Grid Link project was initiated as part of the Grid 25 programme in 2008 where we were seeing high levels of actual demand and continuing levels of demand growth over the forthcoming period. As I mentioned earlier, while the economy turned dramatically, the energy demand piece did not turn as rapidly. In terms of the Grid Link project, as we do with all projects we review them before we move them to the next stage. We continually do that. When we did that with the Grid Link project as part of the overall review of Grid 25 and the detailed assessment of overhead and underground options, this new technology option became a viable option that was identified at that time. It was not identified earlier because of the higher demand levels and higher demand growth rates.

It is appropriate that we continue to review projects at stage gates as they go forward to make sure that where there are new options, we identify them. We were open about identifying this back in March. When we published our draft review of the strategy we included this in it because we had done that, and we continued to do the detailed design and assessment of it through the rest of the year, such that we could do that full assessment of the option. However, we felt that to mitigate the issue the Deputy mentioned about the suddenness of it coming out, and given that we had identified it as a strategic option back in March, we should be open and transparent about that and get communities' feedback on that as part of the wider grid development strategy. That led us to a point where, in September, we had done that detailed comparison of the options against the criteria of environmental, technical and economic considerations. We try to manage it in that way and be systematic about the way we review projects to make sure that we are only bringing forward those projects that are appropriate, and that we continue

to assess them to make sure they are appropriate. That is how that evolved, and to some extent that is the reasoning behind including it as a strategic option in the March publication. We wanted to get communities' view on it and get that engagement on it before we even got to a point where we had all the detailed work done on it.

The Deputy asked us to explain how the regional option works. I will try to do that and then hand over to Mr. Norton, who knows much more about this than I do, although he can jump in if I am not making sense.

Deputy Michael Colreavy: My specific query is whether it involves taking resources from low demand areas to high demand areas because there is a possible down side in that scenario.

Mr. Fintan Slye: Effectively, it enables an existing mesh transmission network, which has been developed here over years, to transmit higher levels of power from one area to another. It takes a grid and between places on that grid it enables it to transmit more power across the existing network. In the case of Grid Link, the need to do something is driven in part by the fact that there is a great deal of renewable generation coming on stream in the south and south west. In Cork and Kerry, there is a lot of renewable generation coming on stream and I mentioned earlier in response to Deputy Michael Moynihan that a number of transmission stations are being built down there to facilitate that. Part of it is to move that increased level of renewable resource and get it to where the demand for increased levels of power is - primarily on the eastern seaboard concentrated around Dublin. To allay a concern which may have underpinned the question, the solution does not take the power and force it to go somewhere, it enables the grid to carry it if that is the right thing for the grid to do. It is not *de facto* depriving an area of resources. If I am not getting to the heart of the Deputy's question, I ask him to please say so and I will try again.

Deputy Michael Colreavy: A potential heavy-demand customer may wish to set up a business outside the major centre of population.

Mr. Fintan Slye: Is the question whether this helps them?

Deputy Michael Colreavy: I do not know yet. My concern is that if there were an industry that was a heavy-demand user that wanted to set up in the west or north west, would it not gravitate towards the major city because that is where the supply is going? It is taken from the south and put into Dublin.

Mr. Fintan Slye: None of the Grid Link options materially changes the situation *vis-à-vis* the supply to a large industrial customer in the west of Ireland, for example, Mayo.

Deputy Michael Colreavy: Or a possible customer who is looking to invest.

Mr. Fintan Slye: Or a possible customer. None of the options materially changes that situation. What will dictate the availability of supply for a customer in Mayo, for example, will be how large a customer it is and how close it is to existing or planned infrastructure. If the customer is relatively close to an existing transmission line and that transmission line has capacity, there is the ability with an overhead transmission line to tap in and create a station and serve them. That is what is being pursued by the likes of the Apple development in Athenry. The Apple site has two 220 kV transmission lines traversing it and therefore it is easy to tap in. The Grid Link project is about the balance of power between those emerging resources in the south and south west of the country and trying to get that to the demand centre in Dublin. None of the options would materially affect a new pharmaceutical plant that was contemplating developing in Carrick-on-Shannon, if that answers the Deputy's question.

Deputy Michael Colreavy: Yes.

Chairman: I am anxious not to intrude but I want to keep matters moving as Senator Terry Brennan has to go to the Seanad and other members have issues to raise. I will allow members to come back in if there are questions which are unanswered.

Deputy Michael Colreavy: I asked about the potential for integration of the British supply and mainland Europe supply with regional option.

Mr. Fintan Slye: At the moment, the island of Ireland has two interconnectors to the UK, one from Northern Ireland near Belfast across to Scotland and one from Meath at Rush beach to Wales. Those two are in existence and working. We are looking at a possible interconnector to France and have done some work on a seabed survey for that. All of the options we set out in the draft strategy - all three of them - would be compatible with an interconnection to France. The interconnection is not a driver for the project but all of them are sufficient to meet the needs should such a project ultimately develop. I am happy to talk further about the Ireland-France interconnection if the Deputy wishes.

Senator Terry Brennan: I thank Mr. Slye for his deliberations here this morning. I welcome the change with Grid Link and Grid West and utilising the existing infrastructure. That is to be commended. We have an existing North-South infrastructure at the moment in time of 220 kV. I realise the difficulty with running a 440 kV cable underground and the expense of that. My question is as follows. We have a 220 kV interconnector and need a 440 kV interconnector North-South. Has EirGrid considered the possibility of running a 220 kV interconnector underground in parallel with the existing overhead that is there? That is an option and if it has not been looked at, it should be. I share the concerns of the people of Meath, Monaghan and Cavan and note their reluctance and the way they have been treated. They see what has happened with Grid West. EirGrid said there were no new options for the interconnector between North and South. Has EirGrid considered the possibility of an underground solution in parallel? It can run in parallel with the existing overhead.

On the question of demand for electricity reducing, we are talking about planning for 2025 to 2030 and 15 or 20 years ahead. There is no guarantee that demand will not increase. More houses and factories are being built, which we encourage, and demand will go forward. I would like EirGrid to look at the possibility of running a complete 220 kV interconnector underground in parallel with the existing overhead. EirGrid has looked at utilising the existing 220 kV and increasing the height of the pylons or adding the odd one in when the spans are too long. I hope that has been looked at. I am not happy that there is no alternative to an overhead interconnector. I am not convinced about it and I would like Mr. Slye to convince me. That is my main concern and it is the concern of the people of the north east. They would gladly welcome a complete underground solution in parallel with the existing line when we cannot do the 440 kV.

Mr. Fintan Slye: The Senator is quite right that there is an existing overhead line which is 275 kV in fact as that is the voltage in Northern Ireland and as such the transformers exist and allow the station. There is an underground alternative to the North-South project and it is deployed using HVDC technology. It is technically possible to do it as we outlined the last time we were at the committee. It is technically not as good a solution, but it is a technically possible one.

Senator Terry Brennan: Why not do it? I am not happy that there are technological difficulties.

Mr. Fintan Slye: We have been clear that technically it can be done.

Senator Terry Brennan: It can be done.

Mr. Fintan Slye: It can be done and we were clear about that the last time we were here also that it is a technically acceptable solution.

Senator Terry Brennan: We are saving big money on Grid West and Grid Link. Why not put it into a complete underground project?

Chairman: That point has been made already.

Mr. Fintan Slye: I wish to reiterate that the Grid West project is on hold pending clarification on what is happening around a number of wind farms currently in the planning process. There is a technical alternative to overhead on the North-South interconnector which is the deployment of high voltage direct current, HVDC, technology. This involves a converter station at each end and a cable between the two converter stations. This is technically not as good a solution because one is inserting a new technology into the middle of a mesh AC network and it requires very complex control systems to manage it which have a risk of failure. It also does not facilitate economic development along the route in the same way an overhead line does. We spoke earlier about some large companies tapping into the existing transmission network which is possible with an overhead transmission network. The scale of costs involved with an underground HVDC are so prohibitive that no industrial customer would do it, which is another reason it is not a good solution.

However, HVDC is a technical alternative and we have set out the costs associated with that technology, which are very significant. Based on the facts that it is not technically as viable and that it would cost customers considerably more, we believe it is appropriate to proceed with an overhead line option and have put that to planning and we have set out the alternatives within that.

Senator Terry Brennan: Will the witness clarify if a 220 kV underground cable could be run underground to the 275 kV line in Northern Ireland in parallel with what we have at the moment? This would be 275 kV plus 200 kV which is 475 kV. The demand for electricity is reducing and I am sure it is the same situation in Northern Ireland, so has EirGrid looked at the 220 kV in parallel with the existing overhead?

Mr. Fintan Slye: The issue-----

Senator Terry Brennan: I appreciate the difficulty with the 440 kV.

Mr. Fintan Slye: The issue is not so much the voltage level but the technology, by which I mean whether it is AC or DC technology. There are technical limits to how much undergrounding can be achieved with AC technology. Those limits are shorter at 400 kV than at 220 kV, and shorter again at 220 kV than at 110 kV. It is not possible to run a high voltage AC circuit at 220 kV or 400 kV for the length of the North-South interconnector. To go underground one would need to move to a different technology which is HVDC technology to deliver that. The voltage has an effect on the amount that can be underground, but it is an inherent fact of AC transmission technology that there are technical limits on the amount of undergrounding that can be done at high voltages. We have looked at an underground solution, we have looked at ways to deliver that underground solution and we have determined that it is not possible to do it at AC but it is possible to do it at DC. That is the alternative that exists. That was one of the key

conclusions of the international expert commission review for the Government and reported at this committee, that employing AC technology for the length of the North-South interconnector was not technically feasible.

Senator Terry Brennan: Has EirGrid looked at the possibility of a 220 kV underground cable for the entire length or in phases of underground and overhead? One would not have the difficulties that occur with different kV, and I appreciate those difficulties. I believe the possibility of a 220 kV should be looked at in parallel with the overhead that is there now. The two could be run in parallel.

Mr. Fintan Slye: Absolutely. And when the 400 kV overhead solution is delivered it will run in parallel with the 275 kV and will be operated in parallel with it, but it is not technically possible to underground the full length of the North-South interconnector with 220 kV.

Senator Terry Brennan: I mean in the sense that parts of it would be underground and overhead in the non-sensitive areas, and that these can be combined. The option should be looked at before we are told it cannot be done.

Chairman: The Senator has made his point.

Deputy Patrick O'Donovan: I welcome the representatives from EirGrid. I have sat through these meetings from the very start and from the day that the chairman designate of EirGrid was before the committee. I asked him if he would like to live beside a pylon himself. He said "No." Over the years the committee has heard that we were a growing economy, which we have at the moment, thank God, and that a growing economy would require this project on a regional basis.

The committee was told that under no circumstances could there be any option other than lattice structures. We heard from EirGrid representatives that in the west there would be no option other than lattice structures. I am not from either of those regions. I am from a region where we have these structures crossing the mid-west from Loop Head, right through the centre of County Clare, up into Tipperary and down into Limerick. I was always interested in the project and whether, in the event there was an underground option for new development, there would also be an underground option for existing networks.

This process appears to lack any degree of credibility. There is zero credibility. We are back in a situation now where the economy is growing. The IDA tells us that one of its fundamental requirements is a need for energy in the regions and I imagine that includes the south east and the west. All of a sudden the south east and the west are stalled or scrapped, depending on how one looks at it, but not the north east. The north east will not benefit from this. The committee learned from a meeting with representatives from EirGrid that the beneficiary of this project will be Northern Ireland. We find ourselves in a situation where areas that will be worst affected will not benefit at all.

We are also being told that there is a possibility of laying a cable, presumably in the seabed to France with all the different technologies and voltages between the French and the Irish sides, while at the same time every excuse is put in the way of linking this jurisdiction with the Northern jurisdiction, ultimately to benefit the Northern economy. I do not have a difficulty with that but there is a difficulty with the double standard which emerged a long time ago when this committee was told one could have any option in the south east and west as long as it was a lattice structure. That has now changed but it has not changed for the north east. I do not

represent that area but I look at fairness and impartiality and it would seem that if we are going to have a growing economy on the entire island and if there are deficits in energy supply, there would be a universal approach on an all island basis but that is not what is happening. It seems to be piecemeal and *ad hoc* and we are at a stage now where we are nearly making it up as we go along.

As a Member of the Oireachtas I have zero confidence in this system at the moment. If I were representing an area that was under the microscope for this, I could not tell people I had any confidence in this as it is being chopped and changed. Two or three years ago the committee was told that this was the only option for the south east. Now that is gone and there are many options for the south east. It can be solved regionally and there is a possible solution for the west but we are still being told there is no solution for the north east other than the one we are going to plough ahead with. At the same time there is the possibility of a cable to France at God only knows how much cost and I presume it is not going to be lattice structures across the Celtic Sea or the Bay of Biscay.

I have a very straightforward question. Could we stop the pretence that things cannot change and everything must be as it was three years ago? Everything is not as it was three years ago and there have been changes. The economy is growing and there is much more demand for electricity, as there will be in future. It seems there is a complete lack of credibility from the organisational perspective in how this has been designed and sold.

I said last week with regard to another organisation that a hames has been made of this from start to finish. We are now in a position where this is happening in one region in the country. I do not represent it and know nothing about it but if I was from there, I would be very sore. There is an obligation, as this body is owned by the taxpayers, to listen to people. That has not been done at all for the past number of years. The chairman-designate said at the time that he would not like to live beside one of these structures and his honesty was refreshing, although it nearly cost him his position. If he would not like to live beside one of these, why should somebody in Cavan, Monaghan or Meath, as their communities will not benefit in any case? The beneficiaries would be communities in Northern Ireland with an energy shortage. Ironically, at the last meeting we were told the cable would go underground when it crosses the Border.

We have been at this a long time and we are going around in a circle. As we have gone on the merry-go-round, two regions, namely, the west and the south east, have fallen off. To inject any degree of credibility into what is being done, EirGrid should pull the handbrake and admit this has been a public relations farce from start to finish. It should explain how it was to consult with people and produce nice documents but although it got 38,000 submissions, it seems it did not listen to anybody. This is not what is needed.

Now that EirGrid has decided to forget about the lattice structures and pylons all over the south east and it is looking at undergrounding options, where does that leave the existing infrastructure built from Loop Head up through the centre of the country? People in the regions have grown up with those structures and we have spoken about electromagnetic radiation, with potential health and planning impacts. There are other concerns in the north east, the south east and the west. Where does this leave people in the midlands and the mid-west, who have had these for the 30 years since Moneypoint opened? People have a right to be absolutely incensed by the way in which this issue has been handled from start to finish. There is zero confidence in this process.

Chairman: I will take a brief supplementary question from Deputy McEntee before re-

verting for replies and taking the next three members, Senator Byrne, Deputy Fitzmaurice and Deputy Durkan.

Deputy Helen McEntee: I have a clear and straight question. Will EirGrid consider an alternative option for the North-South interconnector? We know from previous applications that although it is at the planning stage, it can be withdrawn. Tens of millions of euro in taxpayers' money has been wasted so far in getting to this point and hundreds of thousands of euro in local people's money was wasted when the application was initially withdrawn. In the interests of fairness for the people in Meath, Cavan and Monaghan, will EirGrid put forward or consider another option for this? Every other county and region has been afforded a different opportunity.

Chairman: I ask the witness to give as full but as brief an answer as possible.

Mr. Fintan Slye: I will deal with the beneficiaries of the North-South interconnector project first as there are a few elements worth addressing. Deputy O'Donovan stated that the only beneficiaries would be in Northern Ireland but I assure the Deputy that is not the case.

Deputy Patrick O'Donovan: That is what we were told the last time we discussed the issue. We were told the principal beneficiaries would be in the Northern Ireland economy. EirGrid told us that the last time.

Mr. Fintan Slye: I am quite happy to go back and look at the transcripts. It was stated that there is an imminent security of supply issue in Northern Ireland the North-South interconnector is required to address that security of supply issue. That security of supply issue exists in Northern Ireland.

Deputy Patrick O'Donovan: The people of Cavan, Monaghan and Meath have to fix it.

Chairman: The Deputy made his point.

Mr. Fintan Slye: That is only one of the reasons for the North-South interconnector. The second reason is that it is a bottleneck. We have an all-island wholesale electricity market and the current single link between the two systems represents a bottleneck that is costing consumers on the island tens of millions of euro every year. All customers will benefit by removing that bottleneck.

Deputy Patrick O'Donovan: This is important. The last time the point was made in this room-----

Chairman: Briefly, Deputy.

Deputy Patrick O'Donovan: I asked the last time to what extent people will benefit. What percentage reduction in energy costs for the consumer will we see as a result of this being built?

Mr. Fintan Slye: Savings will run from €20 million to €30 million per year, rising to €40 million by 2030. Those savings will accrue to customers right across the island.

Deputy Patrick O'Donovan: They will see a reduction in electricity bills.

Mr. Fintan Slye: It will be a reduction from what they would otherwise have been.

Deputy Patrick O'Donovan: Has the regulator signed off on that?

Mr. Fintan Slye: Yes.

Deputy Patrick O'Donovan: What percentage of a cut are consumers likely to see?

Mr. Fintan Slye: I have not done the maths on that. I do not have the number off the top of my head. I outlined the cost savings in the tens of millions of euro, rising from 2020 to 2030. They have been reviewed with the regulators.

There is an immediate and urgent need in Northern Ireland with regard to security of supply, as the system will go into deficit from 2020 onwards. It is a real and urgent need. By building the second North-South interconnector, we allow for generation to be pooled across the island, effectively, which is how we address the security of supply issue. Over the long run, that delivers benefits to all consumers as there is a bigger portfolio of generation available. In the long term, all electricity consumers on the island will benefit from that.

In line with Government policy published in 2012 and the commitment we made in 2014, there is an element of community gain associated with the development of the North-South interconnector. We have been quite upfront and explicit about that, and it is part of the planning application for the North-South interconnector. We recognise that any infrastructure that benefits society and the economy as a whole will have an impact, to a greater extent, on those communities that have to host it. That is quite clear and we understand the issue.

The Deputy mentioned an issue in passing. Although I am not sure about the reference, he spoke about the North-South interconnector going underground when it crosses the Border. The planning application that exists in the Republic of Ireland and the application made in Northern Ireland are for overhead structures from the transmission station in Tyrone to the transmission station in Meath. If there was a miscommunication, I should be clear that it does not go underground when it crosses the Border.

Deputy Patrick O'Donovan: I also spoke about the interconnector to France.

Mr. Fintan Slye: That process is at a very early stage with regard to feasibility development. It will be laid on the sea bed and use technology equivalent to what was deployed for the east-west interconnector being commissioned. It is the very same technology we have set out as the technical alternative of undergrounding for the North-South interconnector. It is the same technology, absolutely consistent with what we have discussed as a technical alternative to an overhead option. As per the earlier discussion, it is technically feasible although it is not technically as good. It has a range of issues and it costs significantly more. We have examined that option.

Deputy O'Donovan mentioned double standards or things not being done for the people of Meath, Cavan and Monaghan that have been done for people in other parts of the country. This issue was referred by the Minister to the independent expert panel, chaired by Mrs. Justice Catherine McGuinness and including the economists Mr. Colm McCarthy and Professor John FitzGerald, the electrical engineering professor Professor Keith Bell, and Dr. Karen Foley from UCD. They were specifically asked the question Deputy O'Donovan raised about whether the same level of analysis of alternative options had been afforded to the people of Meath, Cavan and Monaghan on the North-South interconnector as was being done for the Grid West and the Grid Link projects, and they confirmed in July 2014 that it had in fact been done. That was an independent assessment of all the work and analysis that had been done on the various options for the North-South interconnector project. It is not just us saying that; it is that independent

expert panel established by the former Minister, Deputy Rabbitte.

Deputy Patrick O'Donovan: One can almost guarantee that the one question they were not asked was the question Mr. O'Connor was asked - that is, whether they themselves would like to live beside one.

Chairman: Perhaps Mr. Slye would address Deputy McEntee's questions.

Deputy Helen McEntee: The Chairman might allow me to elaborate slightly. They have said that an underground alternative is possible; it is just not the best one. As far as I am aware, what is being proposed now for Grid Link will not add any extra capacity to the grid and it may have to be re-examined in a number of years' time. Why is that not possible for the North-South interconnector, when EirGrid may have new technology after a certain amount of time? I apologise as I am not technologically savvy, but where there may be changes in the future, can we not go with something that is suitable for now but that could possibly be upgraded in the future?

Mr. Fintan Slye: Unfortunately, no such option exists, and I will explain the reason. Just to reflect a little on the regional option, what it is and how it works in terms of the technology, it involves deploying this technology on an existing meshed transmission network. The grid in the Republic is developed and operates as a meshed transmission network, and what this technology allows us to do is to transmit more power over that existing meshed transmission network. Unfortunately-----

Deputy Helen McEntee: Has it brought extra capacity to the grid?

Mr. Fintan Slye: It increases the ability of the grid to transport power.

Deputy Helen McEntee: But it will not increase the capacity to the grid.

Mr. Fintan Slye: It increases the capacity of the grid to move power between nodes, and we will be able to move significantly more power, for example, from the Cork-Kerry region to the eastern seaboard and the Dublin region. It increases the capacity.

I mentioned earlier that in addition to the deployment of series compensation, there is also new high-voltage cable as part of that overall suite of measures underneath the Shannon - obviously, we will need to engage with communities and consenting authorities as we bring that forward - and also a series of line up-ratings around the south east in order to increase the overall capacity of the grid in other areas in order to make it work.

In the case of the North-South interconnector, unfortunately, that meshed transition network quite simply is not there because it was never developed as such. It was developed and planned, and is operated, as two separated grids and, therefore, unfortunately, there is no transmission network on which to deploy this technology, and what is needed is another link or piece of infrastructure with the North. This leads us down the road of asking, if one is to deploy that, what are the options for doing so. The options really boil down to high-voltage AC overhead lines, which is the option we have identified as the preferred option and brought into the planning process, and the technical alternative, which we have discussed here, of deploying high-voltage DC technology, which enables one to go underground over considerably greater distances, and certainly enough for the North-South interconnector, but has a number of technical issues.

Deputy Helen McEntee: So EirGrid will not consider an alternative and, realistically, it never really has, because overhead has always been preferred. While EirGrid may have done

the work, it has never realistically looked at any other option.

Mr. Fintan Slye: We have looked extensively at the underground option.

Deputy Helen McEntee: Sorry; the word is “considered.” EirGrid has never really considered it.

Mr. Fintan Slye: We have assessed it comprehensively and we have gone back to that on several occasions to ensure that the option we are bringing forward is the appropriate one, in part because we recognise that it is a difficult and controversial project and we want to ensure that we are doing right for the people of Ireland. Just to be clear, we have no interest in building pylons or in any particular type of solution. They do not even sit on our asset base. This is the result of our efforts to work out what is the best option in the policy and regulatory framework within which we operate. We have at each stage gone back to ensure that the proposal we are bringing forward is the appropriate one. We believe it is, and we have brought it into the planning process, which is the statutory consenting process with An Bord Pleanála. We have set out, as is required, all the alternatives within that. It includes the reports by the international expert commission and others. All of that is in there. It is the appropriate body to progress that application and provide a view on the application that we have submitted.

Chairman: I now will take everybody else together. I will let Deputy Colreavy in with a brief supplementary question, and then Senator Byrne.

Deputy Michael Colreavy: Is it a fact that we could be using the less expensive and much less obtrusive series compensation technology if Northern Ireland had the same web infrastructure as the Republic?

Chairman: If Mr. Slye could bank that question, we will come back to it.

Senator Thomas Byrne: Mr. Slye mentioned the Government policy statement of July 2012 on interconnectors and EirGrid infrastructure. On that date, there was a direction from the then Minister, Deputy Rabbitte, to EirGrid to go ahead with the project. There was a separate direction issued at the time, if Mr. Slye recalls.

Chairman: Okay.

Senator Thomas Byrne: I am merely recalling that. Effectively, EirGrid is acting on that policy decision from 2012. Really, nothing has changed, from EirGrid’s point of view, in respect of the North-South project since then.

In relation to representations made, would Mr. Slye or any of his colleagues have had contact with the Taoiseach or the Minister of State, Deputy Ring, on the project in the west, and were political representations made? Would that have had an influence on the process in that area? I suppose I had better ask the same question in respect of Grid Link. Clearly, there was considerable political controversy at the time. I would be surprised if they had not been in touch with Mr. Slye. If not, they would be among the few Oireachtas Members who were not. I wonder whether that political interaction played any role in the decisions that were taken in respect of Grid West and Grid Link, and what the position is.

The reality is that the people of-----

Chairman: Sorry. The committee is here to find out the facts.

Senator Thomas Byrne: Facts from EirGrid.

Chairman: The political questions are outside the remit of this committee.

Senator Thomas Byrne: They are not. This is a political body.

Chairman: I am making a point.

Senator Thomas Byrne: This is where politics are engaged. I do not know whether the Chairman had any role in that. Fair play to the Chairman if he was looking after his constituents. I would admire him for getting a result.

Chairman: Senator Byrne is looking after his now anyway, as well as Deputy McEntee.

Senator Thomas Byrne: Maybe the Chairman had a role there. As I said, I would commend him if he did. I am in no way critical of any representational function of Dáil Deputies on this issue. In fact, that is my point.

Chairman: I ask Senator Byrne to continue.

Senator Thomas Byrne: The people of Meath and, I suppose, Cavan and Monaghan, are up in arms about this. They will be up in arms even more listening to what I would consider the clearest statement from EirGrid on the alternative of an underground option, as stated this morning by Mr. Slye. It could not be clearer. Mr. Slye has stated it here. That has changed incrementally over the past number of years. The representatives from EirGrid made a clear statement to Deputy Moynihan the last time I was here. This did not exist in 2007. Apparently, we were told it could not be done. That is the clearest statement possible. The people of Meath will not accept anything less. That is a fact.

The opposition to this project is such that it is surely a factor in the cost calculations of EirGrid. The fact that this project has been delayed for eight years must surely be a major factor in terms of the additional costs that EirGrid has incurred, some of which are the fault of EirGrid and others that are through no fault of EirGrid. In any event, that cost is there and it will continue throughout an oral hearing. There was no word in County Meath about the east-west interconnector underground. I know some objected in north Dublin, perhaps, but not a word was said in County Meath. Generally, EirGrid has good relations with the community in that part of the county. That must count for something. It is in place for four or five years at this stage and it must be looked at. That must be the way to do it, instead of riling the people and creating considerable anger and unfairness in respect of how different parts of the country seem to be treated based, it seems to me, upon political representation.

I am keen to make another point. The Deputy from Limerick is Deputy Patrick O'Donovan. I should know him because at one time we appeared on the same episode of "Where in the World" some 20 years ago. We were against each other. That is a little known fact, but he reminded me of it some years ago. He made the point that there would be no benefit to the north east and that this was only benefiting Northern Ireland. I am keen to put on the record that I have no difficulty benefiting the North. Certainly, I support anything that can lead to better integration of the electricity market on this island and working towards an all-island electricity market. However, it cannot be done at the cost of an environmental, health, historical and heritage catastrophe. That must be taken into account. The people in Meath, myself included, demand that this be put underground.

Deputy Michael Fitzmaurice: I thank the EirGrid deputation for their presentation. I wish to clarify a point on Grid West. The representatives from EirGrid have said it is dead in the water at the moment. Is that for good? I want to know that clearly.

One thing EirGrid might consider is the position around Carrick-on-Shannon. I was down there where all the networks come together and it is like a spider with ten times the number of legs it should have. It needs a ferocious tidying up. If I lived around there, I would consider getting a con saw given the state of things. It is brutal, to be honest. I do not know how people in that area can put up with the maze of wires coming every which way. A farmer could not even farm properly. I call on EirGrid to look at that.

Reference was made to the North-South issue. Has EirGrid examined producing more electricity in the North, perhaps with a view to there being no necessity for this to go ahead? The EirGrid representatives have talked about two sides of the country being dead in the water now. For the sake of the future, EirGrid representatives have said previously that they could not do it in every part of Ireland. Part of Grid West was supposed to go underground at the time. Why can we not facilitate the people now in Monaghan and those affected by the North-South issue and put it underground and go for it? It may cost a little extra but I do not believe people begrudge other people in any part of the country eyesores. I do not want people enduring eyesores, no matter where they are. EirGrid should strongly look at this. No one begrudges anyone electricity whether they are in the north, south, east or west. The EirGrid representatives mentioned people with different justices and people from different backgrounds. It is one thing to live in a place and not look at these things but it is another thing to have them 50 or 60 meters from the back door. This is sickening equipment to have nearby.

I am not from that area, but EirGrid should consider listening to the people and the representatives from there. Deputy Patrick O'Donovan is from Limerick country. I am from the west of Ireland. I have no wish to see someone from another part of Ireland disenfranchised or put out. They deserve the same as anyone else. I call on EirGrid to consider that and go for it.

Deputy Bernard J. Durkan: I am keen to make this as quick as possible. I am sorry for coming in, as I am not a member of this committee but I was previously a member of a similar committee. I was a spokesman in this area for a number of years. I will start from where Deputy Patrick O'Donovan left off in terms of lack of confidence in the system and EirGrid. I believe there is an inability on the part of EirGrid to do its job and not only that, but there is also the failure to identify accurately and to represent the position as inherited from a previous Government, one with which Senator Byrne has some familiarity, which entered into an international agreement that imposed certain conditions on this country in terms of electricity, alternative energy and the identification of requirements. All of that is in addition to what will flow from the agricultural sector in terms of requirements towards carbon reduction. EirGrid has done nothing to in any way enhance the confidence we should have in the ability of the company to do that job, because it has equivocated in respect of everything.

In the United Kingdom, people are clearly told the difference between underground and overground costs. Whether it is five times or six times the cost, people are told straight off. There is no equivocation. There is no such thing as saying that it is not really five times and it may be two and half times, in which case it would amount to the same thing. That is the cost. At present, they are designing systems in the UK to transmit electricity overground. If people want them to go underground, then the relevant region pays for it.

I am concerned about this and I do not believe EirGrid is going anywhere. I do not believe

EirGrid has identified the extent to which economic growth in this country is going to drive the requirement for energy in future. EirGrid has failed in that regard. EirGrid has changed decisions in mid-air without consultation with anyone. That is not something to engender confidence in either the people who are affected or the public representatives who have to carry the responsibility for it.

As Members of the Oireachtas, we have shouldered the responsibility in recent years of doing what a previous Government determined we should do, that is, develop alternative energy. However, there are few options. We have been left swinging. I totally disagree with what Senator Byrne has said. His organisation knew full well what was going on. I was invited to Cavan, Monaghan and north Meath when I was a spokesman on this matter to address these issues well before the last general election. What was going on there was well known. This is not new at all.

(Interruptions).

Deputy Bernard J. Durkan: I can tell Deputy Byrne more about it. We have an organisation with primary responsibility for the creation of a reliable electricity grid and, at the same time, a responsibility for ensuring that we have uninterrupted power in future. The people in EirGrid change their minds on a regular basis and equivocate about the costs and the best methods. Then, they become vague about everything else they are asked and other questions and so on. We are going nowhere. I predict that within ten years we will have a situation whereby there will be blackouts in this country. The people in EirGrid have responsibility for that. Obviously, by then they will have moved on.

I am sorry to be harsh, Chairman, but no words of mine can adequately describe the annoyance of people in my constituency and other constituencies throughout the country who have had foisted upon them a belief that EirGrid was in control, that those responsible knew what they were talking about and that we were going to proceed in a particular fashion. The people in EirGrid have not even thought about it yet. If they had, they would have thought more carefully before they made their decisions.

Chairman: Mr. Slye, do you want to take the questions in order, starting with Deputy Colreavy's question?

Mr. Fintan Slye: Deputy Colreavy's question was whether the design of the grid in Northern Ireland was a factor in the-----

Deputy Michael Colreavy: No, my question was whether we were capable of using less expensive and far less obtrusive compensation technology in Northern Ireland if Northern Ireland had the same mesh infrastructure as the South.

Mr. Fintan Slye: Northern Ireland does have the same mesh infrastructure as Ireland. The issue is that there are two separate grids joined by a single interconnector at the moment. The mesh grid does not exist between the two networks. Individually they are meshed grids, but the joining of the two is the problem.

Deputy Michael Colreavy: It is difficult to see how we cannot connect in the same way as we are able to connect Cork with Dublin.

Mr. Fintan Slye: There is no mesh network between the grid of Northern Ireland and the

grid of the Republic, there is only a single network. We need the ability to transfer more power reliably between those two. Between Munster and Leinster, there is a mesh grid on which something can be built but that is not the case between Ireland and Northern Ireland. Each has been developed separately as a mesh transmission network.

Deputy Michael Colreavy: What is the distance between the two meshes?

Mr. Fintan Slye: Between the two networks?

Deputy Michael Colreavy: Between the Northern Ireland network and that of the Republic.

Mr. Fintan Slye: At their closest, they are probably around 40 km from each other. However, the issue is that the network is not strong enough to support it at those points.

Deputy Michael Colreavy: Can that 40 km not be run underground?

Mr. Fintan Slye: That 40 km would not provide a robust connection between the two systems.

Deputy Michael Colreavy: That 40 km-----

Mr. Fintan Slye: Correct. It would not, because the network on the Republic of Ireland side is not strong enough at that point to support the interconnection. That is why the North-South interconnector runs from Meath through Monaghan and Cavan and across the Border into Tyrone.

Deputy Michael Colreavy: I need more information on that. I do not understand it.

Mr. Fintan Slye: I would be happy to sit down with Deputy Colreavy immediately after this if he wants. A quick sketch on a piece of paper might actually answer his questions.

Chairman: A one-to-one meeting.

Mr. Fintan Slye: In response to Senator Byrne, I have asked my colleagues and I am not aware of a direction from the former Minister, Deputy Rabbitte, to proceed with North-South interconnector and neither are they. The Senator referred to 2012. We are not aware of that being issued in association with or around the time of the policy statement I talked about. I am not aware of it.

Senator Thomas Byrne: Is it in the press release?

Mr. Fintan Slye: It is in the press release for that day.

Chairman: The point has been made, if Mr. Slye wants to move on.

Mr. Fintan Slye: We can come back to it. I am just not aware of it at present. Senator Byrne asked about political interaction and political interference, to use his words, in terms of the decision on Grid Link. To be categorical about it, there was none and that was not a contributory factor in any way, shape or form, with the identification of the option, first, and its publication in March, the subsequent consultation on that and the decision after the preparation of the report for the independent expert panel to proceed with the regional option. There was no political interference in any way with that.

Senator Thomas Byrne: There were no representations at all. We saw with Westport House that the Minister of State, Deputy Ring, was well able - fair play to him - to facilitate a meeting with NAMA and the local authority. Was there even anything like that in this case?

Mr. Fintan Slye: In respect of the Taoiseach and the Minister of State, Deputy Ring, I have never met either of them in connection with Grid West or Grid Link. Only yesterday we hosted a briefing day in the Oireachtas by means of which we briefed any Members who were interested in a very open way. We make an effort to ensure all Members of both Houses of the Oireachtas are briefed on our plans and developments. I am sure that over the course of that briefings have been provided to a range of Deputies and Senators. Senator Byrne referred to the east-west interconnector and how that went smoothly as a model for what could be done in the North-South context. There was very vocal and organised resistance to the east-west interconnector and the undergrounding, particularly through communities around Rush.

Senator Thomas Byrne: As I recall, the Minister, Deputy Reilly, was supporting that at the time, but not in Meath.

Mr. Fintan Slye: No, but just to point out that undergrounding is not always a silver-bullet solution in terms of interacting with communities. It generated quite a lot of heat and resistance there.

Deputy Fitzmaurice asked for clarity on the situation with respect to Grid West. We prepared the report as per the terms set out by the independent expert panel on the underground and overhead options. We published that earlier this year and we have engaged with communities around that. The project is on hold, pending clarity from the developers of the various large wind farms around Mayo and their intentions. As we mentioned earlier, one of them, the Clud-daun wind farm developed by Coillte, was refused planning permission earlier this year. The Oweninny wind farm, parts of which are being developed by Bord na Móna and other parts in a joint venture with the ESB, currently has planning permission but an application to alter this is currently with An Bord Pleanála. Obviously, we would envisage that the developers would want to see the outcome of that planning process before they can provide clarity. We do not think it is appropriate to move forward with an engagement with communities around selecting an option until we get clarity from the developers as to what developments in terms of renewable generation in Mayo will be proceeding. That is the status of the matter: it is on hold pending clarity around that. We have asked urgently for the developers to provide us with clarity on that. Notwithstanding this, the planning process that is currently under way will have a material impact on their plans.

Deputy Fitzmaurice also mentioned Carrick-on-Shannon. There is a huge number of transmission lines in the vicinity of Carrick-on-Shannon, overhead transmission lines, both 220 kV and 110 kV. We could take that one away, have the look at the situation there and see in the context of any upgrades or work that needs to be done whether there is a way to tidy up some of the spider's web, as the Deputy described it. I am aware of the situation around there and we will take that away. I thank the Deputy for the feedback on that.

The Deputy asked a question about the North-South interconnector and whether there was the option to produce more in Northern Ireland. At the outset, I want to say that we are statutorily barred from engaging in generation in any way, shape or form, contracting for it or engaging in the buying or selling of it. What we have is an all-island energy market that was initiated in 2007. Part of that is a mechanism that encourages generators to develop the appropriate generation facilities to meet the needs of the island as a whole. That was a core premise of the

all-island energy market, that it would serve all customers on the island. What we have seen is that there is sufficient capacity on the island but that in the specific jurisdiction of Northern Ireland there is not, hence the need for the North-South interconnector.

Deputy Michael Fitzmaurice: If there were 40 km underground, could the line be upgraded without putting anything else in the overhead part of it? There is a line in at the moment. Mr. Slye said there was 40 km in the difference

Mr. Fintan Slye: Sorry, 40 km was in reference to Deputy Colreavy's question about how close the two grids come to each other at any point on either side of the Border.

Deputy Michael Fitzmaurice: Yes.

Mr. Fintan Slye: My guess, and it is a complete guess, is probably 40 km.

Deputy Michael Fitzmaurice: Fair enough, we are not tying Mr. Slye to the distance. I have seen lines in different parts of the country that were upgraded where it might be carrying three wires and there are six on it now because they have put different spokes out of it. Why can that not be considered and put it underground for the 40 km or whatever it is?

Mr. Fintan Slye: In order for them to work, each of the two circuits need to be broadly of the same capacity, such that with the failure of one - due to a lightning strike or someone driving a truck into it - the power can transfer onto the other one. What ends up happening is that the capacity of both links is limited by the lower of the two because, obviously, if one fails, the power will transfer to the other. It cannot meet the same needs as the North-South interconnector. The Deputy asked about putting it underground. This goes back to the fact we have looked at this extensively. I reiterate, and we were clear at the previous committee meeting, that undergrounding using HVDC is technically a viable solution but it has technical drawbacks, is technically not as good and has significant cost implications for all consumers.

Deputy Michael Fitzmaurice: In the past week I read a report about the ESB, whereby approximately €100 million will be used to subsidise wind energy. If EirGrid is prepared to do this, I am damned sure it should look at what would help a community, be it in Monaghan or Cavan. The company cannot keep going down the road of ramming stuff down people's throats.

Mr. Fintan Slye: In January 2014, we set out a number of initiatives and we were acutely conscious we needed to review and improve how we consult and engage. We did an extensive review of this and published the findings of the reports even if at times they made difficult reading for us. We published them in their entirety and set out a number of commitments we made to fix it. We also set out a community gain fund. The policy basis for this was set out in the Government's policy statement in 2012, with the onus clearly put on the developers of projects. We set out quite clearly what we thought was appropriate in this context, and this applies to the North-South interconnector project. We are acutely conscious this is a difficult project which impacts on communities along the route, and we need to continue to engage with them and listen to their concerns, which are real, to try to address them as best we possibly can.

Deputy Durkan also asked questions.

Chairman: Deputy Durkan has left but Mr. Slye may put his response on the record.

Mr. Fintan Slye: He spoke about an international grid and I am not 100% sure which one this is. Perhaps it is the EU's 2020 targets by which Ireland is bound. To set out the process

we have gone through, we published the Grid25 strategy and consulted on it in 2008. This set off a number of individual projects on which we consulted and engaged with people. We are quite adamant it is appropriate that we continually review projects as we go forward, to ensure they remain appropriate for the society, economy and people who are ultimately going to pay for them. This is what we did. We did a full review of the overall strategy itself and published it as a draft. We engaged in a consultation for ten weeks and did a series of roadshows and public meetings throughout the country with members of the public, facilitated by Irish Rural Link. We also met chambers of commerce and other interest groups to get their input into the decision.

Reference was made to changing decisions without consultation and this is not what we have done. We have been very transparent in terms of how we looked to develop the grid, the overall strategy and how we consult and engage with people on this strategy and on individual projects. Ultimately, our commitment to looking at all available technology options to maximise the use of the existing grid will serve the people by ensuring the best solution is developed and will serve communities by ensuring we engage with them properly with all the options being discussed. As I referred to earlier, we have done extensive analysis of our consultation and engagement process to ensure we learn and improve. As a company we are committed to continuing to learn and improve as we go forward.

Deputy Martin Heydon: Understandably, this morning's discussion strayed away from Grid Link quite a bit. How much of the change to the Grid Link project is down to the reduction in the targeted demand in 2008 at the height of the boom and how much of it is due to the increase that series compensation will give on the lines? Is the reduction what was forecast or is series compensation giving EirGrid half as much again, with the two meeting in the middle? Is Mr. Slye confident the series compensation option and what is being put in place for Grid Link will futureproof it and, if so, for how long?

Mr. Fintan Slye: To answer Deputy Heydon's first question, he probably hit on it himself because it is a combination of both factors. The reduction in demand means the increase in power transfer capability that can be delivered by series compensation represents a viable solution which will last for the foreseeable future, which is 2025 to 2030 with regard to projections of growth.

Mr. Mark Norton: The point to bear in mind is that series compensation does not increase the capabilities of the lines. What it does is allow the use of the existing network. The reason the solution works is as much due to the longer-term projection of demand increasing over the course of time and therefore the longevity it provides. It is a direct result of a solution that would have been too short-term to have been viable in the past, but now the slower growth and the longer time it will take to reach the same demand levels mean it will be an enduring solution for a much longer period and will make a sound investment.

Mr. Fintan Slye: It inherently increases the transfer capacity of the underlying transmission grid to move power. Mr. Norton has addressed the second part of the question, regarding how long it will last. We have looked at it out to 2020 and 2025 and assessed this against projections for growth of the economy overall, specifically looking at the sectors of growth in various sectors of the economy in that region, to ensure it will be adequate for the needs of the economy. We had it assessed and verified through an independent review by Indecon Consulting, which we also published alongside the strategy. It looked at the new grid development strategy we proposed and examined whether it would deliver to meet the needs of the economy and society region by region. The new option for Grid Link was identified as an option in the report and

was included in the analysis.

Chairman: Will Mr. Slye clarify the implications for Northern Ireland if the North-South interconnector does not go ahead? He mentioned there would be a saving of €30 million but with regard to the provision of power in the North, if this does not go ahead for various reasons, such as if planning permission were not granted, what is plan B in the short term and the longer term for the North?

Mr. Fintan Slye: This was specifically addressed by the chief executive of the Utility Regulator in Northern Ireland at a conference recently. She was categorical that the North-South interconnector had to proceed because of the serious consequences for security of supply in Northern Ireland. The supply and demand balance will move into deficit after 2021, which threatens the ability to keep the lights on in Northern Ireland, that most fundamental touchstone of provision of electricity supply to fuel an economy. She was quite clear that in terms of what is needed to be done, there is no plan B and we really need to move forward with this and deliver it. This is a critical project because it will provide security of supply for consumers in Northern Ireland and across the island. The all-island electricity market has been in place since 2007 and it has served customers well. It is a robust wholesale market. Part of the initiative in this regard was to create a grid that would allow power to flow seamlessly across the island to where it is needed. The key link is the North-South interconnector and it needs to be delivered.

Chairman: Is there no plan B?

Mr. Fintan Slye: There is no plan B.

Chairman: On behalf of the committee, I thank Mr. Slye, Ms Steen, Mr. Fitzgerald and Mr. Norton for attending. Everyone will agree that the questions strayed a little bit from the Grid Link project and I thank the delegation for answering all of them. We look forward to developments in this area. It is important that public representatives express their views on the various issues in terms of representing their constituencies.

As there is no other business, I propose that this meeting of the joint committee adjourn until 2.30 p.m. tomorrow. Is that agreed? Agreed.

The joint committee adjourned at 12.10 p.m. until 2.30 p.m. on Thursday, 5 November 2015.