

Northern Ireland Electricity Medium Term Plan Phase 2

Final Decision

22 February 2013



CONTENTS

1	Introduction	3
2	NIE Request.....	4
3	Analysis of NIE’s proposal	5
4	Consultation Responses	6
5	Decision	6

1 INTRODUCTION

- 1.1 In the strategic energy framework (SEF) of 2010, DETI set a target of 40% of electricity consumed in NI coming from renewable sources by 2020. NI peak consumption of electricity is 1777 MW, with a summer minimum of 516 MW.
- 1.2 Currently 451 MW of wind is connected to the electricity system in NI, while a further 550 MW has obtained planning permission and is in the process of connecting. A further 636 MW of renewable generation is in the process of obtaining planning permission. These wind farms are predominantly located in the north and west of NI. These are the areas where the electricity transmission network is lightest.
- 1.3 NIE is obliged under its licence to connect generation in a non-discriminatory manner and obliged by statute law to ensure that the network is “economic, co-ordinated and efficient.”
- 1.4 NIE has divided its network developments for renewable generation into 3 stages:
 - The short term plan: upgrading existing network assets and smart solutions to increase their capacity on windy days;
 - The medium term plan: projects to increase the capacity of the 110 kV network and to increase flows up to the 275 kV network;
 - The renewable integration development plan: new assets at 110 kV, 275 kV and above.
- 1.5 NIE has completed the short term work and is part way through the medium term plan. This paper covers further work required to on the medium term plan. NIE are finalising the plan for developing the 275 kV network to accommodate the volume of renewable generation required to achieve the SEF target. We approved funding from customers for NIE to undertake the studies associated with this in January 2008. The final proposals will be published in due course.
- 1.6 NIE has requested £27.8 million to undertake two projects to increase the network capacity available for renewable generation. These form part of a larger programme of works, which NIE estimate will cost £43.8 million in total. NIE is currently obtaining the statutory consents necessary for the remaining £16 million of investment.
- 1.7 We issued our proposed decision to approve this funding in December 2012. We received six responses to this consultation, which did not contain any new information that would cause us to change this decision.

1.8 We therefore approve the £27.8 million investment that NIE are ready to undertake and approve in principle the remaining investment to complete this phase of the Medium Term Plan.

1.9 This document contains a summary of:

- NIE's request;
- the responses to our consultation;
- our comments on these responses;
- and the investment we are approving.

2 NIE REQUEST

2.1 NIE have analysed flows on the network in accordance with the planning and operation standards (as specified in condition 19 of its licence). This has identified three bottlenecks when the 1000 MW of renewable generation with planning permission connects to the network.

1. Kells to Coleraine circuit (project 1)
2. Capacity at the Tamnamore sub-station (project 2)
3. Capacity between Omagh and Tamnamore (project 3)

2.2 NIE propose to resolve these bottlenecks as part of its Medium Term Plan. It has requested approval from us to undertake two capital investments and has provided information to us about how it proposes to resolve the third bottleneck.

2.3 In each case, NIE has identified the least cost method of removing the bottleneck. The three projects are to:

1. Increase the rating of the Kells to Coleraine circuit by installing higher capacity conductor at critical spans (project 1)
2. Install additional capacity at the Tamnamore sub-station (project 2)
3. Install a third circuit between Omagh and Tamnamore (project 3)

2.4 The capital costs of the projects are listed in Table 1.

2.5

Project	Amount Requested (£m)	Status
Kells – Coleraine Uprate	£2.6	With UR for approval
Tamnamore Phase 2	£25.2	
Omagh - Tamnamore 3rd Circuit	£16.0 ¹	With UR for pre-construction approval (£1.25m)
Total	£43.8	

Table 1: Capital Cost

2.6 NIE has some contracts in place for the Kells to Coleraine and Tamnamore Phase 2 projects. It will commence work on the additional procurement following this approval.

2.7 Planning permission has recently been granted for the third circuit between Omagh and Tamnamore. NIE will now commence detailed design and the wayleaves process. It will request approval for the construction of this circuit when it has completed these tasks and the associated procurement processes.

2.8 NIE has indicated to us that it expects to complete the Tamnamore Phase 2 project during the 2016/17 financial year. The other two projects should be completed before the end of 2016. NIE has not made any commitment to deliver the additional capacity provided by these schemes by any specific date. It is our intention to publish information on progress quarterly.

3 ANALYSIS OF NIE'S PROPOSAL

3.1 Our proposed decision paper contains details of the analyses that we undertook to reach that proposed decision. This included:

- Modelling of the impact of network constraints by SONI;
- The impact on the strategic energy framework targets;
- The impact on consumer tariffs in NI;
- How these relate to our statutory duties.

3.2 These analyses showed that approving the investments is consistent with our duties to protect consumers, including the need to “secure a diverse and environmentally sustainable” generation mix.

¹ Latest best estimate 22/11/12, includes £1.25 million for pre-construction costs. This value may change as the detailed design has not been prepared.

4 CONSULTATION RESPONSES

- 4.1 We received six responses to our consultation. We have published these along with this paper on our website. We have responded to the detailed points raised in Appendix 1.
- 4.2 One response was from NIE, who supported the investment, but highlighted some factual points in the proposed decision that they had not flagged to us when they undertook a factual review before publication.
- 4.3 Three responses were from other parties (NIRIG, RES and Energia) also supporting the investment; including one from NIRIG representing the views of 34 organisations (we have confirmed in writing that this was the consensus view of these organisations). These parties requested that we include timescales for implementation in our approval.
- 4.4 Two were from interested parties (Wind Watch NI and Ken McLeod) who raised wider concerns about the increase in wind generation in NI. These concerns were more related to government policy, the wholesale market and the costs associated with the utilisation of wind energy (spinning reserve, start-up costs etc.) They did not raise any points that appear to be directly related to this investment. However, they did raise points that are relevant to other work-streams in the Single Electricity Market. The references to these work streams are included in Appendix A.

5 DECISION

- 5.1 We will approve these projects under the RP4 Dt term in Annex 2 of NIE's current transmission licence². The actual efficiently incurred costs of the projects will be added to the transmission renewables RAB. This will be depreciated over 40 years at 3% for the first 20 years and 2% for the second 20 years. NIE will be paid a return on the undepreciated investment at the weighted average cost of capital specified for that RAB in the relevant price control. The treatment of the tax associated with this return will be specified in NIE's licence. This rate of return and treatment of the associated tax may vary over the 40 year period.
- 5.2 Adding the actual costs of the project to the RAB places any remaining cost risk with consumers. An overview of the risk allocation associated with these projects is included in Table 5.

² http://www.uregni.gov.uk/publications/nie_licence_modification_september_2012

Risk Type	Placed With	Mitigation
Cost	Consumer	Amount assessed includes 10% contingency. NIE consider this sufficient to cover all foreseeable risks within its control. Other risks may arise that are outside NIE's control. NIE will request additional funding in advance of incurring any costs above the amounts approved.
Time	Consumer / Developers	Visibility of cost and delivery throughout programme. Regular updates provided to the renewable Grid Liaison Group, published along with the minutes on UReg website.

Table 5: Risk allocation for the Medium Term Plan