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Railfuture East Anglia Response to the Sizewell C – 2nd Stage Public Consultation

sizewell.edfenergyconsultation.info/szc-proposals/stage-2/

Railfuture welcomes the opportunity to submit comments on the proposals for Sizewell C Nuclear Power station at this stage of the public consultation.

About Railfuture

Railfuture is an independent campaigning organisation whose aims are to see greater use made of the railways in the UK for the movement of both passengers and goods and to lobby for expansion of the network in order to bring the benefits of rail to more communities and businesses.

Railfuture is not politically aligned nor does it receive income from any train operator or supplier or representative body within the rail industry. It has no position on the merits of nuclear power within the nation's energy mix, save for the desire to see the rail network eventually electrified for which there will be a requirement for additional generating capacity. We therefore treat the proposal for Sizewell C as we would any large construction project requiring significant movements of people and materials.

Railfuture are grateful to Mr Peter Cogar for use of the diagrams in figs. 5-8 and for his advice in preparing this submission.

Summary of our position

- That the construction of Sizewell C should maximise the potential offered by the East Suffolk Rail Line for the movement of employees and materials through investment in improved capacity

- That this investment should go beyond the 'bare minimum' required for the construction phase of the project and, if necessary in combination with contribution from other sources, achieve the full dualling of the line between Woodbridge and Saxmundham in the interests of:-
    - Reduced journey times
    - Improved service reliability
    - Resolution of the conflict between passenger and freight services
    - Further passenger service frequency improvements

- That Sizewell C should leave a lasting legacy of improved rail services on the East Suffolk Line as a beneficial spin-off from the investment needed for its construction. Our case is set out in the following responses.

Accommodation and Transport

Questionnaire Section 7. Transport: Overall Strategy

Railfuture welcomes the commitment to use, wherever possible, non-road transport solutions. We note that emerging thinking for the movement of materials both on and off the construction site is centred on two broad strategies: 'marine max' and 'rail max'.

Marine max: A large and potentially expensive jetty would be required both for construction materials and spoil removal as well as for Abnormally Indivisible Loads (AIL). However, the requirement for a rail head would remain - of the two possible options the smaller one situated east of Leiston has restrictions on operating hours as well as capacity.

Rail max: Offers the potential for a much smaller jetty and the possibility that even this might not be required if it were possible to use the Beach Landing Facility (BLF) for the AILs.

Movement of People

We note the commitment to provide a connecting bus service both at Saxmundham and Darsham for workers wishing to use rail for at least part of their commuting journey. Both towns are a similar distance from the construction site as well as from the opposite ends of the East Suffolk line (22 miles from Ipswich and Lowestoft respectively). We anticipate that flows of commuters to the site will be heaviest from the southern end as Ipswich is roughly twice the size of Lowestoft as well as being a convenient interchange with frequent services to/from London, Chelmsford and Colchester. As a result we suggest that greater emphasis should be placed on the potential for additional services to be between Ipswich and Saxmundham. Our proposals for doubling the line between Woodbridge and Saxmundham would permit this without compromising the operation of freight trains onto the construction site for which greater capacity on the East Suffolk line is required anyway.

Questionnaire Section 8. Transport: Rail

Railfuture supports the 'green route' option (option 1) as this appears to offer far greater capacity for rail than option 2 (Eastlands). We note that discussions are still in progress with Network Rail over the wider network implications for accommodating up to five trains per day and would like to take this opportunity to outline some of the changes, both actual and proposed, that have helped to change the railway landscape since the **Stage 1 consultation** and which provide the backdrop to our proposal.

Changes since the Stage 1 Consultation

1. Continuing Passenger Growth

The UKs railways are experiencing unprecedented levels of growth and are carrying more passengers, on fewer route miles, than at any time since before the Second World War. The East Suffolk Line is no exception as the following illustration shows:

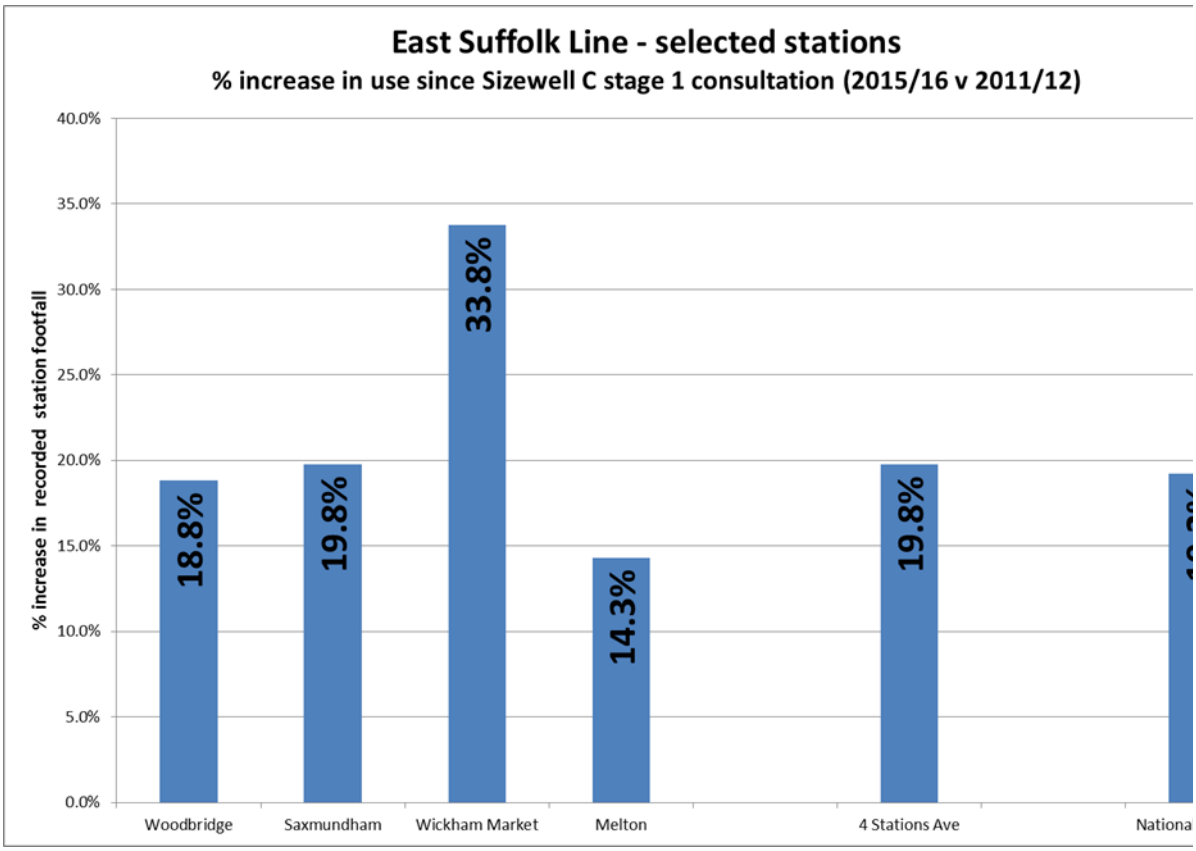


Fig.1. East Suffolk Line passenger growth compared with the national trend

This growth is projected to continue due to a number of factors:-

a) Population growth
b) Local housing growth projections at key locations served by the line
c) Changes in travel habits assisted by mobile technology
d) Relocation of public service headquarters to Melton
e) Construction and operation of Sizewell C
f) Induced demand from improved services on the line

2. The Greater Anglia Franchise Award

The new franchise award was announced in August 2016. Two elements directly impact on the operation of the East Suffolk Line:

a) The complete replacement of the current fleet of trains. Until now the timetable on the East Suffolk line has been written around the slowest of the current diesel units in the

fleet - the class 153 and 156 units - which are limited to 75mph top speed and have limited acceleration. This, together with the restrictions of the route's sections of single line, has removed the incentive to invest in improvements to the line speeds.

This is about to change. The minimum specification for the new rolling stock will be trains capable of 100mph with improved acceleration capability.

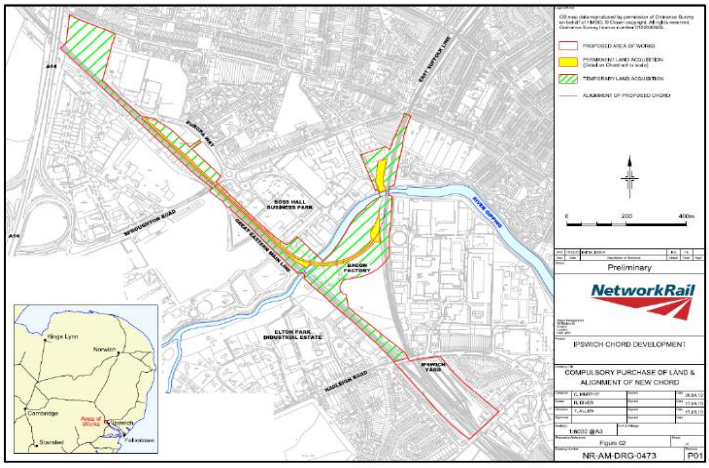
b) The Invitation to Tender (ITT) specified that there should be four trains per day from Lowestoft to London that don't require a change at Ipswich. This places a discipline on train operation with considerable risk to performance if a train is delayed on route. Sections of single line mean that a train running late in one direction is likely to make the train in the opposite direction late as well. With train paths limited on the Great Eastern Main Line (GEML) south of Ipswich there will be considerable advantage in removing as many potential bottlenecks as possible.

3. The 'Bacon Factory Curve'

At the time of the Stage 1 consultation this scheme had only just been granted a Development Consent Order (DCO). It first saw the light of day in the Ipswich Borough Council Draft Local plan of 2001 since when it drew growing support from neighbouring local authorities, The Port of Felixstowe and the Rail Freight Group (RFG). In spite of initial scepticism on the part of Railtrack (later Network Rail) the deliverability of the project was accepted in 2009.

It opened for traffic in April 2014 and has had a dramatic effect on the capacity available at 'East Suffolk Junction' where the East Suffolk Line joins the GEML. It permits freight trains to travel north without the need to reverse in Ipswich yard.

Fig 2. Diagram showing the new freight chord at Ipswich



4. Felixstowe Branch Upgrade

The additional capacity of East Suffolk Junction provided by the Bacon Factory Curve has led to an increase in the number of freight trains using the single track Felixstowe branch. Originally rated at 26 trains per day - in addition to the hourly passenger service - the line is currently being pushed to 33 trains per day (each way) with consequent delays and cancellations to the passenger service. Freight capacity on the line will be enhanced to 45 trains per day (tpd) with the provision of an additional passing loop at Trimley as the following illustration shows

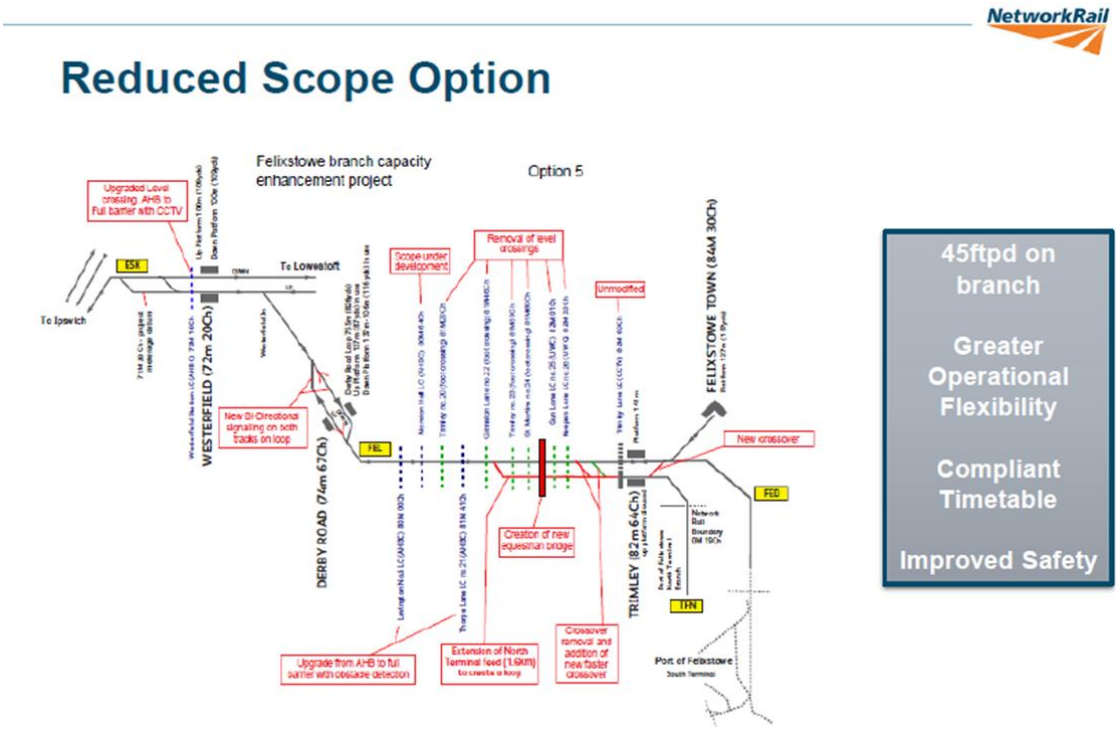


Fig.3. Plan of the proposed capacity measures due by 2019 (Network Rail)

On leaving Ipswich, trains can route either via London or Ely. The route via London is limited to 18 tpd with the remainder going via Ely. Although the branch will be able to convey 45 tpd, restriction on the network in the Ely area effectively cap this to 42 – at present only 24 tpd can be accommodated at Ely pending further investment.

5. Ely 'paused'

Currently the Ely junction consists of several single lead junctions and level crossings – despite the fact that is expected to carry passenger traffic to/from Ipswich, Cambridge, Norwich, Peterborough, Stansted Airport and Kings Lynn as well as the increasing freight flows to/from the nation's largest container port at Felixstowe. There are also proposals for services between Cambridge and Wisbech.

Until the recent 'Hendy review', it was hoped that the two bottlenecks at Ely - the North Junction and the single track section to Soham - would have been tackled in 'control period 5' (2014-19).

However, these schemes were put on hold and now represent the number one priority for rail infrastructure investment in control period 6 (2019-24), We remain hopeful they will be resolved in time for the Sizewell C project.

Fig.4. Diagram of the railway layout at Ely (Network Rail)

We see the construction of Sizewell C as further compelling evidence for these junctions to be improved as a matter of extreme urgency. There is widespread support among the regions MPs and local authorities for these two projects to be reinstated during the current control period and EDF Energy would be joining a powerful lobby group in supporting this demand.

The Case for Doubling the Line from Woodbridge to Saxmundham

Doubling of this line is relatively easy – the existing track is entirely on the down side of the formation, all the land is in Network Rail ownership, and all the structures remain in double-track formation. The line used to be the double-track mainline to Great Yarmouth - 'rationalisation' of the line was only carried out in the 1980's.

At the **stage 1 consultation EDF Energy** proposed a passing loop at Wickham Market. We feel this to be unsuitable for three reasons:

(1) To be of use for passenger trains, it would require an up platform (with full accessibility). At this stage there was no indication that EDF would fund this
(2) It would be alongside a local housing development whose residents would suffer noise pollution from freight trains stopping in the loop, and then accelerating away.
(3) It does not provide the best location for the eventual introduction of a half-hourly passenger service (the optimal location would be a journey time of 12-14 minutes from Saxmundham)

Since the stage 1 consultation we understand that EDF Energy has withdrawn the proposal in this form and are in further discussions with Network Rail about alternatives. We feel that this is therefore the right time to present proposals of our own.

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Why Double Tracking the Full 12 miles is Our Preferred Option

In forming our conclusion we have considered the following alternatives:-

1. **Double-track from just north of Melton to just south of Wickham Market**. Benefits are that no new platform access or reinstatement would be needed, and only one level crossing (LC) would need to be modified (perhaps none if the double track were to start north of Ufford LC). It would require 2 additional points/signals to be installed at new locations on the line with associated maintenance costs for point motors, heaters and lubrication. It permits a half-hourly passenger service, but it creates a performance risk and limits any further development of the line to exploit improved train performance. Nevertheless, it serves the purpose.

2. **Double track from just north of Melton through to Saxmundham**, The approximately 1½ miles of single track this option leaves, would not impose significant timetabling constraints. It may be cheaper in capital terms than the full double track option as it reduces the infrastructure to a single new platform reinstatement/access and 3 LCs to modify but would still require two additional set of points/signals, one of which would be at a new location

3. **Double track the entire section between Woodbridge and Saxmundham (preferred option)** This requires reinstatement of two up platforms and modification of six automatic barrier level crossings. However, it avoids a net increase of point installation, the additional set at Saxmundham being offset by the removal of the set at Woodbridge, and would simplify signalling arrangements. It also offers the highest level of reliability and flexibility for both passenger and freight services as illustrated in the following diagrams.

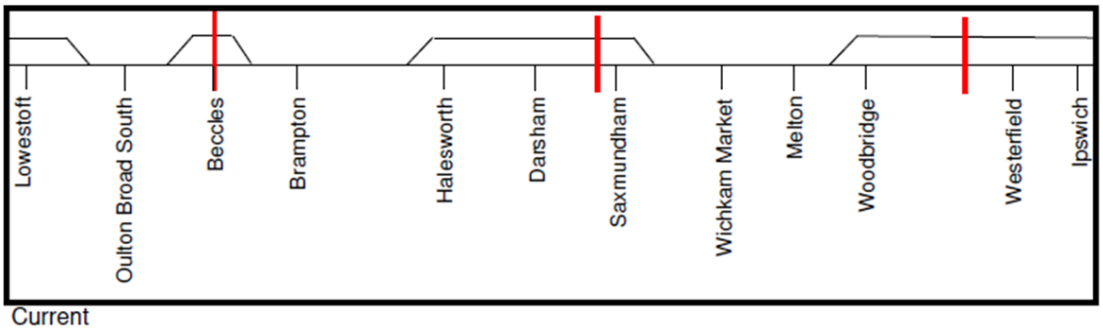

Fig. 5. Existing service with the red markers showing the locations where trains pass each other

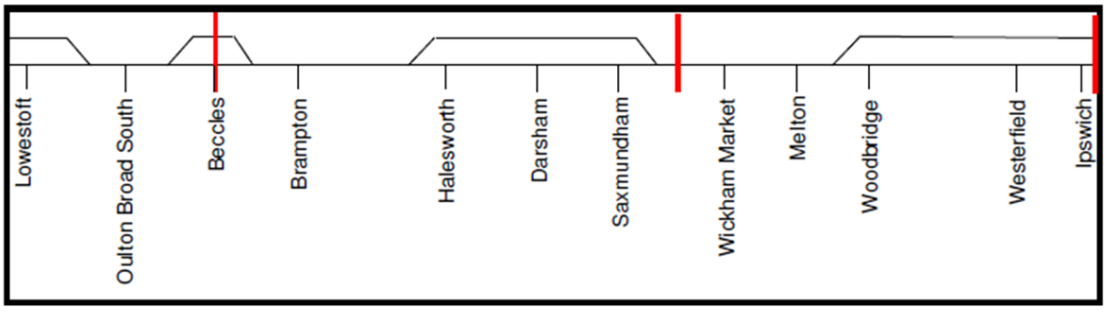

Fig. 6. Exploiting improved train speeds is not possible with the existing layout

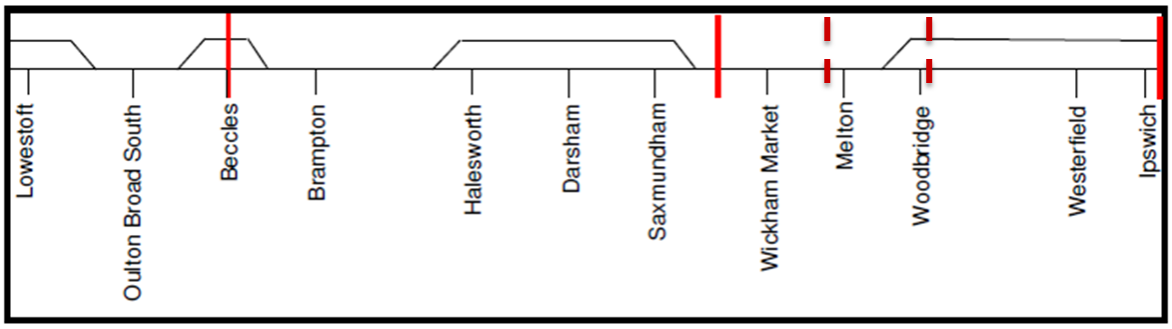

Fig.7. Shows the addition of an extra passenger train creating two new passing places where trains pass one another

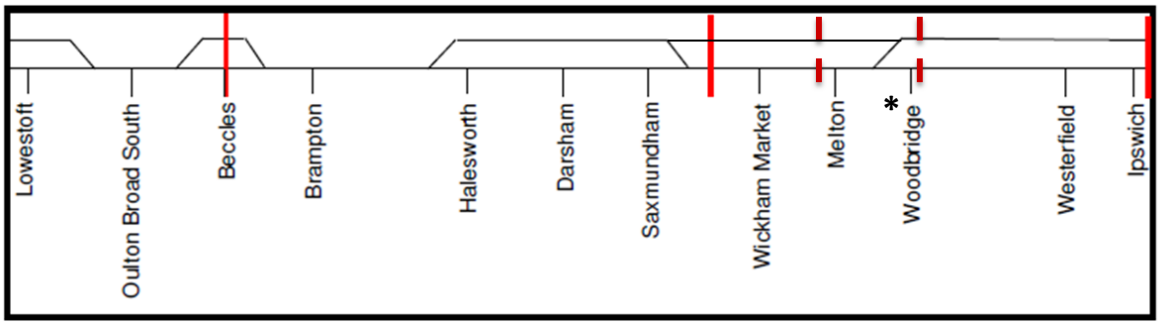

Fig. 8. Shows how doubling of the line provides for variation in passing places for different permutations of service and service reliability as well as capacity for freight.
***The points at the Woodbridge end would be redundant in the event of 'up' platforms at Melton and Wickham Market being brought back into use.**

Stations at Wickham Market and Melton

Both stations still exhibit the remains of the former platforms on the 'up' line, the condition of which would need to be assessed prior to any refurbishment or replacement. In both cases, access suitable for persons with restricted mobility would be required from the 'down' platforms.

Fig.9. Former 'up' platform at Melton

Fig.10. Former 'up' platform Wickham Market

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Possible Timetable - Existing and Proposed Services

	Existing service pattern		Proposed service pattern		
	East Suffolk Line	Felixstowe Line	East Suffolk Line (fast)	East Suffolk Line (stopping)	Felixstowe line
Lowestoft	X		X		
Oulton Broad Sth.	X		X		
Beccles	X		X		
Brampton	R		R		
Halesworth	X		X		
Darsham	X		X		
Leiston				X	
Saxmundham	X		X	X	
Wickham Market	X			X	
Melton	X			X	
Woodbridge	X		X	X	
Felixstowe		X			X
Trimley		X			X
Derby Road		X			X
Westerfield	X*	X		X	X
Ipswich	X	X	X	X	X

**Only a limited number of East Suffolk Line trains call at Westerfield but this is the location of a housing development of 1,500 homes to the north of Ipswich during the Sizewell C project timescale.*
***R** Brampton is a 'request only' stop.*

Costs

There have been two projects involving the reinstatement of a comparable length of double track in recent years:

(1) Moreton -Evesham (15 miles) and Charlbury - Ascott (4 miles) on the Oxford-Worcester line.
(2) Stroud-Kemble (11 miles)

The Stroud to Kemble reinstatement of a former double track formation where track had been previously been taken up, cost £45m. Transposing these onto the East Suffolk line will not be a straightforward 'mile for mile' comparison however since this scheme was for a 100mph railway and involved 'slewing' the existing line as well as adding the second and included re-signalling. It also involved work inside a tunnel.

The Oxford-Worcester line involved 2 separate sites and came in at £70m.

Costs for the East Suffolk line therefore should be significantly cheaper and much depends on any periods of line closure involved when comparing one scheme with another.

As there are lasting benefits beyond the construction period, we would not expect the full cost to be borne by the Sizewell C project. Contributions for the East Suffolk Line Scheme could be sought from:-

a) Network Rail
b) The Local Enterprise Partnership
c) The passenger franchise holder (Abellio) who have an interest in improving speed and frequency of services

Further platform capacity may also be required at Ipswich to accommodate an extra service each hour along the East Suffolk line. This is another priority for Abellio who are also interested in developing other services from Ipswich and is therefore expected to be outside the scope of the Sizewell C project.

Once in a Lifetime Opportunity

The East Suffolk Line is an important route offering sustainable travel options for the inhabitants of the towns along it. Its development would create a viable and attractive alternative to the increasingly congested A12. The advantages of double-tracking the section between Saxmundham and Woodbridge can be summarised as:-

- Providing for future growth in population and travel demand
- Offering reliable train paths for construction materials for Sizewell C and a possible alternative to expensive transportation of materials by sea
- Potential development of travel opportunities for both construction workers and operating staff for the new power station
- Increased service reliability for passenger services, particularly through services to/from London
- Unlocking the potential of new rolling stock for passenger services.

As such, double-tracking offers a unique opportunity for EDF Energy to leave a positive lasting legacy of benefits both for the local community and the environment.

We therefore trust that you will be persuaded of the strengths of this case, but would be delighted to discuss this with you further.

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