# **Sustainable Transport – Executive Summary**

#### **PURPOSE**

This paper was undertaken to review the proposals being brought forward by the Applicant in the context of the limitations of the Coastal Suffolk road network.

#### **SUMMARY**

Traffic associated with the construction of the proposed Sizewell C power station poses an existential risk to; the Coastal Suffolk environment, flora, fauna, residents health & well-being, local businesses and their viability, tourism and its continuance, landscapes and their implicit value, habitats and ecology.

It is for the Applicant to demonstrate that they have sought to mitigate the "...substantial impacts..." that may arise in the transport of materials, goods, and personnel.

This document considers; the proposals bought forward, the more than eight years of Pre-Application and the likely impacts that collectively Coastal Suffolk's roads may have to absorb should the Consent Order be granted.

As a result, there are over twenty reflections and observations offered to the ExA, where appropriate accompanied by commentary providing background, alongside suggestions on potential courses of action.

## **IKH Galloway**



# **Sustainable Transport**

Roads, traffic, people, ecology and environment

#### 1. INTRODUCTION

**1.1** Much is made by the Applicant with regard to the impact of Nuclear Energy; its role in providing a 'sustainable' source of electricity and thereby supporting the Government in pursuit of a low carbon economy.

However, reflecting on the Applicants dDCO and the Pre-application consultations preceding it, it is my contention that issues of 'sustainability' and 'low impact transport' may not have been front and centre during development of the application.

In this paper I hope to bring to the attention of the ExA a number of concerns, inconsistencies and inadequacies within the Application and identify some options that have been; missed, not fully developed or dismissed.

#### 2. POLICY EXPECTATION

- **2.1** In the Traffic and Transport section (5.13) of the Overarching National Policy Statement for Energy (EN-1) the Government recognise that "...transport of materials, goods and personnel to and from a development during all project phases can have a variety of impacts on the surrounding transport infrastructure and potentially on connecting transport networks...", they also reaffirm "...consideration and mitigation of transport impacts is an essential part of Government's wider policy objectives for sustainable development...".
- 2.2 In respect to mitigation, the Government recognises that "A new energy NSIP may give rise to substantial impacts on the surrounding transport infrastructure and the IPC should therefore ensure that the applicant has sought to mitigate these impacts..." advising that "Where the proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, the IPC should consider requirements to mitigate adverse impacts on transport networks arising from the development..." continuing "Where mitigation is needed, possible demand management measures must be considered..." and concluding "The IPC may attach requirements to a consent where there is likely to be substantial HGV traffic...".

#### 3. ROAD NETWORK OVERVIEW

- **3.1** Coastal Suffolk is an area broadly only accessible on its North-South axis by the A12, a de-trunked road under the management of Suffolk County Council. As identified by the Applicant, in large part it is single carriageway, augmented by short stretches of dual carriageway.
- **3.2** Travel to and from Coastal Suffolk on the East-West axis is largely achieved through a limited number of 'A road' routes, several more 'B' roads and an extensive network of lesser roads and lanes.
- **3.3** Whilst the Applicant asserts "Nearly all the roads in the area are single carriageways", the reality is that for much of its length, when one turns off of the A12, a significant proportion of roads soon turn into very narrow single carriageways or perhaps more significantly 'country lanes'. All are essentially unpaved, many with informal passing (or some limited formalised) arrangements where larger vehicles may be able to pass safely.

- **3.4** The widespread use of; unprotected narrow soft verges, 'drilled' drainage gulleys and unforgiving roadside ditches all provide additional hazards for the unaware commercial vehicle or car driver, and potentially fatal consequences for inexpert motorcyclists.
- **3.5** When reading the Pre-Application and dDCO documents, it is apparent that attention to the detailed complexities of the local network are missed or misrepresented. For example, the Applicant makes observations in respect to specific road conditions, i.e. "...The B1122 is... generally subject to the national speed limit outside the main settlements..." whereas, of the 15km route; 8.3km (55%) is subject to a 40mph limit, with additional stretches of 30mph through villages and smaller communities.
- **3.6** This type of error is widespread and because much of the Applicants research seems to have been desk-based (i.e. Google maps, etc.), anomalies only become evident; either with local knowledge or by good old fashioned physical inspection.

The response of the Kelsale-cum-Carlton Parish Council to all the Applicants Pre-Application Consultations identify many instances of; laxity, omission and inaccuracy. As a consequence the ExA may wish to exercise caution with regard to some assertions made within the dDCO.

- **3.7** In connection to the users and value of local road and lane networks across the County, the ExA should be aware of a continuing programme of 'Quiet Lane' [QL] designation, with a significant interlinking QL network receiving phased designation across several Parishes lying immediately adjacent to the proposed main development and other construction sites being proposed by the Applicant.
- **3.8** The roll-out of the programme has coincided with use of rural roads and lanes burgeoning during the Covid-19 pandemic, not only by pedestrian 'locked down' rural families, but also by the more urban populous of Coastal Suffolk for; exercise, amenity, leisure, tranquillity, respite and renewal.
- **3.9** The local road network has also seen significant increases in; dog-walkers, cyclists, horse-riders, as well as the ubiquitous light commercial vehicles favoured by couriers and online service providers.
- **3.10** As a consequence, it is evident that the potential for conflict between users of unpaved roads and lanes has never been greater. Agricultural and light commercial vehicle users vying for the same limited road space have already increased damage to verges, hedges and roadside habitats, so the introduction of Quiet Lanes and the ethos of consideration and respect for all users is imperative.

Projecting forward, approval of the Sizewell C proposal without robust controls being put in place would constitute an existential threat to this environment and those that rely on it for their livelihood; live within it or utilise it for the beneficial health and well-being it bestows.

The ExA are asked to take extremely seriously the threat posed by the Sizewell C proposal to the rural context of Coastal Suffolk; its amenity value, economic value, ecological value, food production capability and the myriad intangible benefits it brings to individual users.

For the avoidance of doubt, unfettered and unmanaged, the potential magnitude of destruction to be wrought by the sheer scale of non-HGV vehicle movements anticipated within the Applicants dDCO, will lay waste to rural Coastal Suffolk very rapidly and potentially irreversibly.

## 4. CONSTRUCTION TRAFFIC [HGV] - DIMENSION, SCALE AND UNCERTAINTY

- **4.1** Like many others, I was gravely concerned at the opacity, incompleteness, accuracy and inconsistency of some data produced by the Applicant during Pre-Application Consultation rounds.
- **4.2** With the assistance of my local Parish Council (Kelsale-cum-Carlton PC) I was able to raise a number of these issues by integrating concerns within their Consultation Responses, hoping a Parish council might carry more weight than an individual, in trying to get some clarity and transparency.

Regrettably, it seems neither accuracy nor completeness were a priority for the Applicant during Pre-Application and indeed within the dDCO itself. As a consequence, I may have less than a full appreciation of the magnitude of the potential traffic issues even as we enter the Examination phase.

- **4.4** Most recently, the (previously claimed 'unachievable') changes to the Applicants proposals and the very significant uplift (+20%) in the forecast level of 'imported' materials, require far more detail and certainty before the true impacts can be fully understood.
- **4.5** However, for the purpose of this paper I am assuming the 'BEST CASE ROAD' position (i.e. Minimum use of HGV) would enable the Applicant to execute construction of Sizewell C on the following basis:
  - a] 40% of materials delivered to site by road utilising predominately HGV, confirmed by the Applicant to be defined as vehicles of 3.5 tonnes and above (**Source:** EDF virtual meeting with KcC PC 16<sup>th</sup> Mar-21)
  - b] 30-50% of materials delivered to site by rail
  - c] 10-30% of materials delivered to site by sea
  - d] The forecast of imported materials to site is 12.1m tonnes
  - e] Accordingly, the likely extent of road delivered materials is circa 4.84m tonnes
  - f] Assuming materials are transported by the larger HGV classification, with a potential gross payload of circa 29 tonnes, the lowest possible number of HGV deliveries is likely to be circa 166,900 or 333,800 individual HGV movements.
  - g] 85% of HGV journeys will be on the A12 from the South with the remaining 15% coming from the North
  - h] Consequently, the total number of HGV deliveries would be no less than; 141,865 (283,700 movements) and 25,035 (50,070 movements) respectively
  - i] Recent intelligence regarding the likely multiple HGV movements required to facilitate the delivery of singularly large cranes (i.e. several hundred movements), earth moving and tunnelling machines etc. do not seem to be quantified by the Applicant and consequently are excluded from the these estimates. Indeed, any other category of load requiring HGV movements and outside of the 12.1m tonnes of 'imported material' quoted by the applicant is omitted for lack of data.
- 4.6 Nevertheless, conscious the Applicant has consistently played down the likelihood of;
  - 1] gaining agreement for the necessary rail infrastructure changes enabling larger more regular trains
  - 2] gaining the necessary approvals for marine works more substantive in form than an occasional use BLF

# Written Representation No. 3 from Mr I.K.H. Galloway [20025801] in respect of an Application by NNB Generation Company (SCZ) Limited for an Order Granting Development Consent for The Sizewell C Project

It is more likely to conclude (again solely for the purposes of this paper) that the Applicant might, in extremis, seek construction of Sizewell C on the following basis, thereby establishing a potential 'WORST CASE ROAD' position (i.e. Maximum use of HGV) as:

- j] 100% of all material delivered to site by road utilising predominately HGV, confirmed to be defined as vehicles of 3.5 tonnes and above (EDF virtual meeting with KcC PC 16<sup>th</sup> Mar-21)
- k] Zero material delivered to site by rail or sea, save AIL to a BLF
- I] The forecast of imported materials required remains unchanged at 12.1m tonnes
- m] On the same assumption that, all materials are transported by the larger HGV classification, with a potential gross payload of circa 29 tonnes, the lowest possible number of HGV deliveries will be at least 417,241 or 834,482 individual HGV movements.
- N] 85% of HGV journeys will be on the A12 from the South with 15% coming from the North
- O] Therefore, under this scenario HGV deliveries are unlikely to be less than 354,654 (709,308 movements) and 62,586 (125,172 movements) respectively.
- P] Once again recent intelligence regarding the likely multiple HGV movements required to facilitate the delivery of singularly large cranes (i.e. several hundred movements), earth moving and tunnelling machines etc. do not seem to be quantified by the Applicant and consequently are excluded from the these estimates. Indeed, any other category of load requiring HGV movements and outside of the 12.1m tonnes of 'imported material' quoted by the applicant is omitted for lack of data.

In summary, with the current degree of uncertainty over the intentions of the Applicant, or for that matter what is actually deliverable, it is possible that Coastal Suffolk could see;

'BEST CASE ROAD' – a minimum of 333,800 HGV movements over a 9-12 year construction period With the potential for as much as;

'WORST CASE ROAD' - a minimum of 834,482 HGV movements over a 9-12 year construction period

- **4.7** The consequences of an outcome close or above the latter are the total likely HGV mileage on the Southern A12 approach (from the proposed FMC to the proposed SLR roundabout) will exceed 25,700,000km (16,000,000 miles).
- 4.8 In addition, further mileage would be incurred via the Northern A12 approach to the proposed SLR roundabout.
- **4.9** Assuming HGV deliveries on the Northern approach were routed from Lowestoft Port, a 21 mile movement (42 mile round trip) is likely.
- **4.10** The consequences of this are that the total likely HGV mileage on the Northern A12 approach (from Lowestoft Port to the proposed SLR roundabout) will exceed another 4,200,000km (2,600,000 miles).
- **4.11** Finally, both HGV traffic flows would join the proposed SLR and progress via the Theberton bypass to the Main Development, adding a further minimum of 5,675,000km (3,526,000 miles)
- **4.12** Irrespective of the absolute numbers, this volume of additional HGV movements on the A12 paints a very bleak picture, one not made visible to the public during Pre-Application.

The ExA are asked to consider the sheer scale of the potential change in HGV traffic volume (and composition of A12 traffic flows), on a largely unchanged and pre-existing Costal Suffolk road network, as well as potential consequences including:

- a] the direct impacts on local traffic along the A12, the surrounding road network and the country lanes
- b] the direct impact on road surfaces, the underlying road bed structure, verges, gullies and ditches
- c] the financing, planning, execution and timetabling of pro-active road maintenance programmes
- d] the direct impact on Coastal Suffolk residents of the required maintenance programmes (c above)
- e] the direct impact on Coastal Suffolk businesses of the required maintenance programmes (c above)
- f] the indirect impacts on Coastal Suffolk residents daily lives of the required maintenance programmes (c above)
- g] the impacts on quality of life, mental health and well-being from; increased severance, light, noise, pollutants, etc.
- h] the impact on ecoystems, habitats, flora and fauna of; light, noise, dust, pollutants, etc.
- i] driver intimidation by HGV volume increases, road safety, 'road rage', journey times, etc.
- j] the attractiveness of Coastal Suffolk as a tourist, holiday and day trip destination
- k] the impact on Suffolk Coastal businesses dependent on tourist, holiday and day tripper revenues
- 1] the impacts on cultural activities including; festivals, concerts, theatres, local history, attractions, etc.
- m] freedom of movement of; commerce, individuals and groups
- n] seasonal activities; beet and grain harvest, cyclical crop husbandry, etc.
- o] wildlife migratory habits; Red Deer, Fallow Deer, Roe Deer, amphibians, birds, etc.
- p] the Applicants espoused belief in "self-routing" as an effective mitigation of road congestion

# 5. OVERALL CONSTRUCTION TRAFFIC - DIMENSION, SCALE AND UNCERTAINTY

- **5.1** As outlined (at 4 above), it is my experience during all the rounds of Pre-Application Consultation, that the Applicant has made quantifying issues in respect to the 'total forecast traffic' virtually impossible, primarily through three devices;
- a] **Opacity** rather than providing baseline datasets (in their entirety) once, the applicant prefers to tabulate 'extracted' datasets, often in part, without the source data being exposed or referenceable. As a result, quantification of the total forecast vehicle movements (by type) cannot be; calculated, extrapolated or even estimated with any degree of accuracy.
- b] Piecemeal approach tabulated data provided by the Applicant, whilst illustrating a particular point the Applicant wishes to demonstrate, often remains partially developed, necessitating the combination of data from several tables (often not directly compatible) in order to obtain greater understanding.
- c] Incomplete and/or incorrect whether in error or intentionally, data provided in tables cannot always be relied on to be; complete, correct or in other cases even 'summed' appropriately, leading to extensive checking and recalculating where possible.

- **5.2** The latter seems to have been carried through into the dDCO where it becomes necessary to reference several tables [10.4, 10.5, 10.6, 10.7, etc. in the Environmental Statement] in order to build a model that provides a (close to?) comprehensive perspective of forecast traffic movements, by type, destination, time, etc.
- **5.3** Even then, the core analysis (undertaken by the Applicant) did not offer full 24 hour transparency, thereby leaving significant portions of the day (30% plus) unattributed [Environment Statement, Volume 2, Chapter 10 Transport Table 10.4 Caravan Site 'In' refers].
- **5.4** In summary (unless it is buried in portions of the dDCO I have not had time to adequately analyse), some of the data supplied by the Applicant demonstrates a significant lack of; transparency, completeness, clarity and accuracy.

Consequently, the ExA may wish to note the detailed comments made on these issues in each of the successive responses to the Pre-Application Consultations by Kelsale-cum-Carlton Parish Council (attached as appendices). They may also wish to explore with Applicant what specific; actions, changes and responses were made by them to

improve the transparency of their data and address the specific issues raised by several Parish Councils, including Kelsale-Cum-Carlton Parish Council during the Pre-Application Consultations.

#### 6. TRAFFIC - REGIONAL CONTEXT

- **6.1** Coastal Suffolk, Suffolk and the counties comprising the East of England Region form an homogenous whole that, whilst differing in some characteristics, do nevertheless share traits that enable much to be extrapolated from the macro view of traffic trends and thence the potential impacts within Suffolk and more particularly Coastal Suffolk.
- **6.2** Across the East of England Region<sup>A</sup> there are 24,885 miles of roads of which 658 miles (2.6%) are Highways England [HE] managed, slightly above the 'all England average' at 2.39%.
- **6.3** In terms of composition, 75% of HE roads are categorised 'A' roads with the remaining 25% comprising Motorway.
- **6.4** The Local Authority [LA] portfolio is predominantly minor roads (91.9% by miles) with the remaining 8.1% made up of 'Major' roads.

In this respect Coastal Suffolk is broadly typical of the regional pattern; fewer major routes, augmented by an extensive network of minor roads and lanes.

- **6.5** In considering the assertions of the Applicant regarding traffic, the ExA are asked to be mindful of the context in the East of England in 2019 when regionally;
  - i] The 'change in traffic on major roads' compared to 2009¹ was 16.0%, the highest change in Great Britain
  - ii] Rural Principal<sup>2</sup> Road 'vehicle miles' rose to 8.1bn, up 10.95% from 7.3bn in 2015
  - iii] Motor Vehicle Flow<sup>3</sup> on Rural 'A' roads stood at **21,100 vehicles per day**, up 7.65% from 2015.
  - iv] Light Commercial<sup>4</sup> 'vehicle miles' rose to 6.6bn, higher than all but the South East, up 15.78% on 2015
  - v] Heavy Goods4 'vehicle miles' however remained relatively flat at 2.2bn, up just 4.5% on 2015
  - vi] All motor<sup>4</sup> 'vehicle miles' increased by 3.1bn from 2015, an increase of 8.22% close to England's 8.3%

## **Sources:**

All narrative references referring to East of England road length & type are from Department for Transport Statistics - Table TRA4206 (Sept-20)

<sup>&</sup>lt;sup>1</sup> Department for Transport Statistics - Table TRA0105 (Sept-20) 
<sup>2</sup> Department for Transport Statistics - Table TRA0103 (Sept-20)

<sup>&</sup>lt;sup>3</sup> Department for Transport Statistics - Table TRA0302 (Sept-20) 
<sup>4</sup> Department for Transport Statistics - Table TRA0106 (Sept-20)

The ExA should be aware (notwithstanding the Applicants modelling) that, following a steady recovery from the 2008 'financial crisis', Suffolk has continued to see significant growth in vehicle miles through to 2019.

Whilst 'vehicle miles' have clearly declined over the past year (2020-21) corresponding with Covid-19, there is every reason to believe that the underpinning drivers of growth are largely resilient and will recover following the progressive lifting of Covid-19 measures.

The predominant drivers of increased 'vehicle miles' include:

- a] Severely limited public transport provision in Suffolk and surrounding Counties
- b] A significant proportion of the County remaining rural in character and high in agricultural utilisation
- c] Continuing growth in tourism (day trips, touring, weekend stay, private holiday lets, lodges, holiday parks, etc.
- d] A significant number of second and holiday homes
- d] Increasing economic activity
- e] Significant growth in the base activity at Felixstowe Port (containers), accompanied by new activities (i.e. RoRo)
- f] Growth in Light Commercial vehicle miles (above), evidencing growth in online shopping and delivery services

Appendix G illustrates the growth in vehicle miles in Suffolk between 1993 and 2019, alongside the long term trend.

#### 7. SZC - THE CAR CENTRIC CULTURE

- **7.1** During Pre-Application Consultations and now in the examination of the dDCO, the Applicant continues to portray their proposals as; designed to restrict the impacts on Coastal Suffolk communities by employing strategies to limit the amount of traffic on the main A12 route, the B1122 and the surrounding network of roads and lanes.
- **7.2** Quoting from the Applicants Transport Assessment (8.5) Executive Summary:

"The main constituent parts of the transport strategy are: a strategy to transport the construction workforce to the main development site and associated development sites, whilst minimising the impact on local roads and communities;"

- **7.3** In particular the Applicant makes much of; "Constrained car parking / car sharing.", two Park and Ride facilities (North and South), direct bus services, train/bus links from Saxmundham, etc.
- **7.4** However, the professed interest in reducing overall traffic impact is undermined in three proposals being bought forward in the dDCO. Specifically those supporting the implementation of provisions highly influencing construction worker behaviour and endorsing car travel as viable option:

# A] Car Parking Provision

In Schedule 1 (Part 1) of the Sizewell C DCO Project, approval for the following parking provision is sought:

Work No. 1A

- (r) Approximately 1,370 permanent parking spaces
- (x) Approximately 1,000 temporary parking spaces
- (z) Temporary park and ride facility, approximately 600 associated car parking spaces...

Work No. 1B

Work No. 1D

(hh) - Outage Car Parking (unquantified)

Work No. 3

(b) – Up to 1,300 vehicle parking spaces, approximately 60 Blue Badge parking spaces

(c) (ii) – Up to 300 parking spaces

(iii) – Motorcycle parking (unquantified)

In Schedule 1 (Part 2) of the Sizewell C DCO Project, blanket approval is also sought under the guise of "Other Associated Development...And in connection with Work No. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16 and 17" for:

(iii) – temporary vehicle parking (unquantified)

(f) – Vehicle and bicycle parking areas (unquantified)

(i) – parking areas (unquantified)

In summary the quantified (and specific) parking provision exceeds 5,300 spaces, more than;

- twice the total provision of parking spaces at both Park and Ride schemes combined
- sufficient for over two thirds of the workforce (at peak construction) to park on the 'estate'
- and virtually enough parking on a 'typical day' for each construction worker to have their own space!

# **B]** Car Share

- **7.5** Throughout Pre-Application the Applicant, whilst promoting their Car Share initiative in the public domain and locality PR, continually railed against any consideration of targets seeking a higher ratio than 1.1 persons per car.
- **7.6** Indeed, at one EDF Community Forum a Parish Councillor asking the Applicant to set a more ambitious target of maybe two (2+) persons per vehicle, was publicly admonished by an EDF spokesperson, calling her proposal "harsh".
- **7.7** Despite the dated view, there is ample evidence from the growth of autonomous car-pooling and sharing arrangements, as well as large and small UK company schemes, that; ratios of 2+ persons per car can be achieved and sustained, either as part of cultural programmes and/or contractual terms of employment for individuals, contractors and/or sub-contractors.
- **7.8** For example: Legal & General's Surrey 'Kingswood Campus' operated a 3+ car share ratio from the mid 1990's and the early part of the Millennium, prior to relocating all activity to Brighton & Hove, where the same conditions were put in place from Day 1.
- **7.9** BT Group operated a similar scheme (at a similar ratio) when developing their 'work hub' network of offices (now largely replaced by home and flexible working) around the M25, during much the same period.
- **7.10** It is also worthy of note that the Legal and General 'Kingswood Campus' was located in a 'high net worth' residential area comprising predominantly detached houses in an affluent area of south west London.

In the early years Legal and General reinforced the requirements of the scheme with patrols and in many cases 'car removals'. However, once bedded in 'fly parking' fell away sharply and eventually compliance was high enough, that the only monitoring was via 'inspection', initially by a warden and manned entrance barriers and subsequently solely via camera and remote access control.

Although there were occasional criticisms and some complaints from residents (and some employees), the levels were relatively low such that regular community forums proved successful in dealing with most issues, as well as eliciting the occasional 'bouquet', received for acts of kindness and consideration (i.e. letting children discharging from school buses, cross the road safely, etc.).

In summary, the Applicant should be compelled to implement mandatory car share schemes, for the Main Development Site, both Park and Ride sites and the Caravan Site, thereby reducing the volume of 'solo' car journeys to nearer to the origin of workers daily 'commutes' (i.e. individual homes or 'car-pooling' locations).

- **7.11** These measures will not only alleviate the potentially damaging construction worker car density in and around the Main Development Site, but also at Park & Ride sites, the Campus and the Caravan Site.
- **7.12** In addition, with car 'commutes' forecast (by the Applicant) to be up to 90 minutes journey time, the ExA are asked to consider making car-pooling, car sharing and other vehicle reduction initiatives integral to the dDCO and insist on them being implemented by the Applicant through incentives and (where appropriate) contractual obligations on individuals and contracting parties, in order to reduce the detrimental impacts of solo car journeys combined with;
  - a] the type of road comprising the majority of the road network beyond the A12/A14,
  - b] the proposed workforce working pattern(s)
  - c] the type of traffic flows likely to be encountered (i.e. residents, delivery services, emergency services, agricultural, holidaymakers, equine, pedestrian, etc.)
  - d] the low level of lighting on roads and lanes
  - e] physical and mental fatigue
  - f] rural hazards i.e. large mammals, large birds, small amphibians, large slow moving individual agricultural machines and harvesting convoys, etc.
- **7.13** The potential consequences of inaction by the Applicant in respect to the foregoing issues are so parlous, the ExA are asked to rigorously explore (with the Applicant) the incremental imperilment to road users across the region occasioned by the planned workforce arrangements.

Particularly a scenario where an individual could;

- make a (up to 90 minute solo) drive to either Park & Ride
- make a P&R bus journey
- undergo, security, drug and/or alcohol protocols
- participate in shift briefings/assignments, etc.
- complete a full shift of potentially physical labour
- potentially shower and cleandown
- undergo; site exit checks (possible security, drug and/or alcohol protocols?)
- make a P&R bus journey
- and finally, up to a 90 minute solo drive to home

Not forgetting of course, the whole cycle could be repeated five or six (or seven?) times consecutively, dependent on shift arrangements?

- **7.14** The alleviation of increased traffic volumes, not only on Suffolk's minor roads but also those of neighbouring Counties must be a priority for the Applicant for five compelling reasons:
  - a] to avoid unnecessary increases in congestion throughout the East of England Region, that will not only act against the interests of residents, tourists, visitors and local businesses, but also against the interests of the Applicant in avoiding; additional delays, increased costs and the potential quality of work issues, that will invariably follow.
  - **b**] to demonstrate the commitment to the principle of "minimising the impact on local roads and communities", rather than perpetuating the veil of rhetoric rehearsed over the past 8-9 years.
  - c] to avoid potential litigation arising from detrimental impacts on the physical and mental health, well-being and cohesion of communities in Coastal Suffolk and neighbouring Local Authorities.
  - d] to minimise an unnecessary increase in airborne pollutants and the SZC carbon footprint
  - e] to comply with the required responsibilities of Applicants outlined in EN-1 and EN-6

#### C] SLR context

- **7.15** Surprisingly it was not until Stage 3 of the Pre-Application process, that the Applicant brought forward any substantive proposals for accessing of the Main Development Site.
- **7.16** Prior to Stage 3 the Applicant had suggested minor changes to the B1122, presumably on the basis that it was used for the construction of Sizewell B.

However, this would imply the Applicant forgot or overlooked;

- a] that 'marine materials fulfilment' was extensive at that time
- b] the current SZC proposal is for a significantly larger power station than SZB
- c] the report on a Sizewell Link, when it was postulated that SZB & SZB could be constructed simultaneously
- **7.17** Irrespective, what is clear is that the Applicant was 'asleep at the wheel', offering little by way of explanation for the absence of any joined-up thinking in respect to materials delivery, workforce journey, routing resilience, road safety and especially emergency planning, vital (one would think) when proposing to engage thousands of people in significantly intrusive construction immediately adjacent to an operational nuclear power station.
- **7.18** Almost ten years into the planning of their project, and looking at a little changed map of Coastal Suffolk, it 'beggars belief' that any sponsor of a construction scheme dependent on importing significant amounts of material (12.1m tonnes at the latest count) and employing thousands of workers could ever seriously contemplate total reliance on a single 'B' classification road, especially when alternative routes are both limited and even more restrictive.
- **7.19** Furthermore, the route must also service the staff and suppliers of a neighbour, specifically another fully operational power station (in the Applicants own 'fleet') with significant needs both when online and significantly higher during scheduled/unscheduled outages.
- **7.20** As is now the case with the dDCO proposals from Scottish Power Renewables, alternative routes could never be guaranteed to be devoid of other significant; loads and/or traffic flows, over a 12 year period.

**7.21** What was, and is still very obvious, is that the issues of access to the Sizewell site are more profound than just the 'last leg' from the A12 to the Main Development Site.

So, it is even more mystifying to hear the Applicant, writing to a Parish Council, state; "Originally, EDF did not plan to build a link road between the A12 the site." continuing "The primary factor in selecting the proposed route (Route Z) is to minimise the environmental impacts from Sizewell C traffic to local communities on the B1122."

The ExA are asked to review with the Applicant the broader environmental impacts along the length of the A12 (and on its adjacent communities) of potentially in excess of 830,000 unnecessarily long HGV movements, rather than routing to the Sizewell site on a north easterly trajectory, departing the A12 alignment earlier and thereby reducing the overall environmental impact on communities.

#### **SLR Peer Review 2019**

- **7.22** During Pre-Application Consultations through to December 2019 the Applicant provided little clarity or transparency in respect to; how the array of alternative routes for a proposed SLR had been derived, the methodology(ies) employed or the weightings matrix of influential factors driving the decision making process.
- **7.23** Subsequently, in December 2019 the Applicant eventually made available (I understand it to have been on a limited 'by request' basis only) a copy of a Draft Report commissioned with AECOM in April 2019, entitled "Peer Review of Option Selection for Sizewell Link Road" and conducted earlier in April.
- **7.24** The introduction lays out; the intention to submit the dDCO in "Q1 2020", "...construction...to take between 9 and 12 years" and the purpose of the work, specifically at INTRODUCTION 1.4:

"AECOM was commissioned by EDF Energy in April 2019 to carry out a peer review of the assessment work undertaken by EDF Energy to assess the identified options for the Sizewell Link Road (SLR) and the rationale in selecting a preferred option."

#### **INTRODUCTION 1.5:**

"AECOM was asked to undertake an independent selection process to provide an independent opinion of the preferred option for the SLR."

- 7.25 There were no other requirements of the commission within the document.
- **7.26** The peer review was undertaken by Peter Firth and appears to have been largely desk based augmented by a site visit on the 18<sup>th</sup> and 19<sup>th</sup> of April 2019.
- **7.27** The list of documents referenced during the review comprise:
  - a] Sizewell C Stage 3 Pre-Application Documentation (EDF: 2019)

Volume 1 Chapters 1,2,5,6,10,11 & 17

Volume 2 Chapters 5 & 6

Volume 3

- b] A12 Sizewell B Link Road Supplementary Report (Trevor Crocker & Partners: 1987)
- c] A12 Sizewell Link Road Environmental Statement (CEGB/Trevor Crocker & Partners 1989)
- d] B1122 Junction Improvements Environmental Statement (CEGB/Trevor Crocker & Partners 1989)
- e] Sizewell C, Route D2 and B1122 Study Rev 3 (AECOM 2015)

- **7.28** The peer review is silent on the performance of the previously chosen routing and approach for SZB, which may have offered an invaluable insight into the realities and the consequences of the previous decisions on the routing of construction traffic.
- **7.29** The ExA will of course be aware that a significant proportion of 'marine delivery' was utilised during the construction of Sizewell B, significantly reducing dependency on road and rail routes.

It is of course for the ExA to decide whether the Peer Review provides suitable validation of the Applicants preference for proposing an unnecessarily northerly SLR and the commensurate additional 'HGV Miles' it will necessitate over the 9-12 year construction period.

- **7.30** Currently, there appears to be a divergence of opinion on whether the proposed SLR should be reinstated to agricultural use; SCC led by Matthew Hicks are believed to favour the removal of the SLR, whilst ES Council led by Cllr Steve Gallant wish to retain it presumably based on the principle expressed by him on a local radio station recently. Specifically 'ES recognise the need for infrastructure and should take anything they are offered'.
- **7.31** The majority of residents immediately impacted by the proposed SLR, whilst recognising there are differing views, lean heavily (92%) toward removal and reinstatement of agricultural land. (Source: Locality Survey Spring-2021)
- **7.32** As a consequence should the Applicants dDCO proposal be agreed, it may fall to the ExA to make a recommendation to the SoS as to whether the SLR should be removed and the agricultural land reinstated after construction is completed.

#### SLR – Policy expectations and the lack of early promise

**7.33** At Chapter 3 para 3.2.1 of the Environmental Statement [ES] the Applicant states "The A12 between Ipswich and Lowestoft would be the main route corridor for Sizewell C construction traffic on the highway network." Continuing with how "Early Traffic Modelling identified...the majority of the A12 would not experience traffic concerns...,".

**7.34** In the following paragraph, Chapter 3 para 3.2.2 of the Environmental Statement [ES] the Applicant states "No direct link road from the A12 to the main development site was proposed in the Stage 1 or Stage 2 consultation. However, a number of other highway improvements were presented in Stage 2 to help mitigate the impacts of Sizewell C construction traffic on residents and road users."

Referring out to "Chapter 3 of Volume 7 of the ES for full details regarding this." it continues "Of relevance to this chapter however, the following highway improvements were proposed at the Stage 2 consultation:

- Speed limit reductions;
- improvement of the B1122 to the west of the junction with Mill Street
- pedestrian enhancements in Theberton; and
- improvement to the alignment of the B1122 between Theberton and the Sizewell C construction site entrance.

The ExA will of course decide for themselves what the collective impact of the above mentioned "...highway improvements..." would have been on the B1122 and just how much more they would have enabled the B1122 to seamlessly absorb the combined traffic necessary to transport up to and over 12m tonnes of materials and potentially 8,000 workers to site during construction. Noting the Applicant anticipates circa 7,500 daily car and light goods vehicle movements to and from the main sites throughout the 'peak construction' period.

- **7.35** Having considered and absorbed much of the oft duplicated (cut & paste has a lot to answer for!) rhetoric, it is my considered opinion that prior to Stage 2 (the mid-point of their planned Pre-Application consultations) the Applicant had already failed to demonstrate due consideration for the requirements of EN1 identified (Section 2) above.
- **7.36** Moreover, as a consequence of this initial failing, I believe the Applicant deliberately and brazenly continues to defend its position by pursuing a litany of fatuous alternatives.
- **7.37** As a consequence and most importantly to Coastal Suffolk, the Applicant has instead pursued a strategy of bringing 85% of all HGV traffic (along with workforce cars, P&R buses, mail consolidation, etc.) unnecessarily farther north, to a proposed Link Road that relies on the destruction of hectare, upon hectare of better quality, productive farmland, that will seemingly be lost forever if the dDCO gets approval.

At Chapter 3 para 3.2.6 of the Environmental Statement [ES] the Applicant infers they held the view that a reduction of the speed limit on the B1122 to a maximum of 40mph (combined with a few minor physical changes) would be an adequate 'mitigation' for what we now know to be in excess of 7,600 combined traffic movements daily throughout the 'Peak Construction' period.

It beggars belief that; already knowing the likely intensity of the potential traffic movements and their obligations under EN-1 and NPS-6, the Applicant had the temerity not only to proffer such an absurd proposal, but also to baldly restate it as their position within the ES.

This instance, amongst many others, brings into sharp focus the question of how rigorously the Applicant has considered the impact of the proposed methods for executing the SZC construction, on the locality, its ecology, flora and fauna and the people who live and work in it.

Along with many other residents, I trust the ExA will recognise that this is a proposition that reflects neither the requirements of an earnest application (explicit in EN-1 and NPS-6), nor the spirit under which the site assessment was concluded.

Furthermore, with the weight of responsibility for enabling an informed decision to be made by the SoS laying squarely on their shoulders, I encourage the ExA to rigorously pursue the occasioning of a fair and truthful analysis of the dDCO throughout the Examination.

Many question whether the development of such and 'unusually large and complex' proposition at Sizewell is akin to conducting keyhole surgery equipped with an oxyacetylene torch and 4lb club hammer, having cleared the surgeons path to theatre with a howitzer!

**7.38** At Chapter 3 para 3.2.37 of the Environmental Statement [ES] the Applicant asserts "In order to achieve the most benefit of alleviating traffic impacts associated with construction of Sizewell C, the location of the link road would need to be positioned such that the road could accommodate construction workers arriving by car, park and ride buses from both the proposed northern and southern park and ride sites, and all heavy goods vehicles (as

well as some light goods vehicles (LGV)) delivering freight to the construction site. The link road would be open to public use as well as construction traffic associated with the Sizewell C Project."

- **7.39** It is my view that the Applicant is concatenating several issues in order to self-justify not only the SLR, but also to avoid the issue of its removal on completion.
- **7.40** In summary, if the Applicant had wished to reduce the impact of vehicular movements on the local road network why is there:
  - 1] So little innovation?
  - 2] So much provision for car parking across the construction site, campus, caravan site, etc.?
  - 3] Such a low 'hurdle' for car sharing?
  - 4] No consideration of rural tram services, perhaps developing the Leiston Branch Line for mixed use?
  - 5] No consideration of marine passenger services, or even a coastal 'cable car', monorail, etc. with exciting potential for tourism and legacy?

#### 8. CONCLUSIONS

- **8.1** Whilst the Applicant cynically affords the construction works the epithet of "temporary", many Coastal Suffolk residents regard the proposed construction programme as a life sentence; indeed for many it may fill the remainder of their lives.
- **8.2** For the avoidance of doubt I hold; roads, traffic, transport and road safety as fundamental issues for the closest of scrutiny by the ExA.
- **8.3** There can be no doubt that these issues will have profound and lasting impacts on Coastal Suffolk, should the Applicants proposal receive consent.
- **8.4** As an individual, I readily accept it has not been possible to directly contest the Traffic Modelling of the Applicant, due primarily to lack of the requisite software tools, navigation skills, experience, data clarity and parameterisation.
- **8.5** Nonetheless, it has been possible to point out the more obvious errors and deficiencies during the Pre-Application consultations, notifying specifics to the applicant through the consultation responses of Kelsale-cum-Carlton Parish Council. (These are attached as Appendices, should the ExA wish to review specific issues raised within them).
- **8.6** Equally as a resident of Coastal Suffolk, I have also been able to reflect on the reality of the day to day traffic experience along the A12 (and the surrounding road networks) through contact with residents, businesses as well as personal experience and that of friends and close family.

Whilst this may lack the strict disciplines of scientific analysis, it has raised significant issues regarding the approach of the Applicant.

**8.7** The most obvious issue was the omission of seasonal traffic from the Applicants initial traffic analysis, which following receipt of a confirmatory letter from the Department of Transport (attached as an Appendix), the Applicant (albeit inadequately) took steps to address.

**8.8** Other issues may (or may not) have been addressed as the Applicant has steadfastly chosen not to communicate on specific issues raised through the Pre-Application Consultation period, preferring instead to aggregate issues into themes which have then been (inadequately) fed back on, via the Community Forum or 'spun' within the context of their Public Relations vehicles (newspaper advertisements, newsletters, exhibitions, localised meetings etc.).

Without burdening the ExA with a list of specific issues, I believe there are six key areas that merit detailed examination and should be clarified prior to making any recommendation to the SoS:

- 1. Does the Applicant have a demonstrable and sufficiently developed, quantified and comprehensive plan for the transport of all the necessary resources to (and from) the Sizewell site to enable the ExA to have confidence in the mitigations being proposed?
- 2. Has the Applicant taken all reasonable and necessary steps in preparing their Avoidance and Mitigation Plan to minimise the impact of all construction traffic, whether by; road, rail, sea or air on;
  - a] Residents
  - b] Businesses
  - c] Processes
  - d] Environment
  - e] Ecology, habitats and species
  - f] Visitors
  - g] Health and wellbeing
  - i] Existing infrastructure assets
- 3. Has the Applicant made all necessary provisions to ensure that in the event of an evacuation of the Coastal Suffolk area being necessary; residents, workers, visitors (including all tourists) and other persons present are able to be marshalled appropriately in order to facilitate; safe, orderly and effective withdrawal to a 'safe' distance, irrespective of the stage of construction of the proposed development?
- 4. Has the applicant developed readily deployable controls to ensure that individual vehicle movements (Cars, Light Commercial, Heavy Goods, Bus, Coaches, AILS, etc.) are identifiable and can be effectively monitored to ensure compliance with agreed statutory and 'Considerate Contractor' type requirements i.e. workforce and/or supplier behaviours, adherence to routing paths, legal and community safeguarding standards, etc.?
- 5. Is there a comprehensive, independently auditable 'Plan of Compliance' attached to the DCO such that quantified traffic volumes and movements (by vehicle category, time, route, etc.) are in place for each phase of the construction schedule prior to any work commencing on the Sizewell site(s).
- 6. Acknowledging the experience of Somerset since the granting of the HPC DCO, and despite significant increases in the planned SZC; vehicle movements, workforce, materials volumes and other quantifiable dimensions of this dDCO since completion of the Pre-Application Consultations, can the ExA and indeed Coastal Suffolk residents be certain that the Applicant will not bring forward even more material changes shortly after a DCO is granted, should that indeed be the case?

- **8.9** In concluding the ExA are asked to reflect on how much the Applicant emphasises the value of their learning at Hinkley Point and these lessons being easily transferable to Sizewell. Periodically Sizewell has even been portrayed as a duplicate, twin, replica of Hinkley Point C 'a construction project that will benefit immensely from the Applicants experiences in Somerset'.
- **8.10** In my experience claims of that this often 'flatter to deceive', and with several issues of contrast rather than of similarity, the Sizewell-Hinkley Point comparison is little different...or is it?

Size – at over 200ha the Hinkley Point site dwarfs Sizewell at just 117ha (2<sup>nd</sup> smallest site to Heysham at 115 ha)

**Location** – Sizewell lies in a bay, whilst Hinkley Point stands on a promontory

Nearest Motorway access – 13 miles Hinkley Point to J24 M5, 85 miles Sizewell to M25 or 79 miles to J8 M11

Marine access – Hinkley Point obtained marine access, Sizewell has no clear and agreed marine strategy

Rail access – Sizewell has the potential for limited rail access

**'Defence in depth'** – the utilisation of the Sizewell site is considerably reduced as a result of 'Defence in depth' requirements

#### SO, ARE THERE VALUABLE LESSONS TO BE LEARNT FROM ONE SADLY FATAL INCIDENT?

**Resilience of route?** January 21<sup>st</sup> 2020, "...hundreds trapped at Hinkley Point site for three hours after serious crash...at around 5:40pm." (**Source** Somersetlive)

**Single point vulnerabilities** "...thought to be the only route away from the nuclear power plant currently being built and hundreds of people are thought to be stuck behind the closure after leaving work for the day." (**Source** Somersetlive)

**Self-routing, unleashing a beast** "We are advising motorists to avoid the area and find alternative routes until we complete our work at the scene..." (**Source** Avon and Somerset Police)

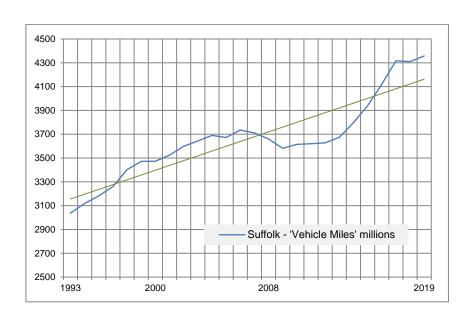
**Coming to Suffolk?** "The whole Hinkley system is abysmal, buses travelling empty at 35mph with 50 cars behind each one going up and down the gearbox waiting for a gap to overtake... It's a recipe for disaster...The LA, HPC and the management of workers at Hinkley...need to sort this out and stop the unnecessary volumes of traffic and they need to do it with some urgency." (**Source** named but unattributed Tweet)

**Local community impacts** "I hate that road. I drive it every morning about 6:40 with all the Hinkley traffic thundering towards me, Terrifying." (**Source** named but unattributed social media post)

**Road wear** "This particular section has a very poor road surface, in need of repair and many drivers pull out to avoid there tyres getting damaged. (**Source** named but unattributed social media post)

#### **APPENDICES**

- 1. Kelsale-cum-Carlton Parish Councils Pre-Application Consultation Stage 2 Response (2017)
- 2. Kelsale-cum-Carlton Parish Councils Pre-Application Consultation Stage 3 Executive Summary (2019)
- 3. Kelsale-cum-Carlton Parish Councils Pre-Application Consultation Stage 3 Response (2019)
- 4. Kelsale-cum-Carlton Parish Councils Pre-Application Consultation Stage 4 Response (2019)
- 5. Kelsale-cum-Carlton Parish Councils Sizewell C EIA Scoping Opinion Response (June 2019)
- 6. Kelsale-cum-Carlton Parish Councils 1st Additional Sizewell C Consultation Foreword and Executive Summary (2020)
- 7. Kelsale-cum-Carlton Parish Councils 1st Additional Sizewell C Consultation Response (2020)
- A] Traffic analysis A12 congestion maps 7:00am to 9:00am (2019)
- B] Traffic analysis A12 congestion maps 3:45pm to 6:15pm (2019)
- C] Kelsale-cum-Carlton Parish Council Community Feedback (2019)
- D] Kelsale-cum-Carlton Parish Council Community Feedback Graphic (2019)
- E] Kelsale-cum-Carlton Parish Council Public Meeting (February 2019)
- F] Kelsale-cum-Carlton Parish Council Verbatim comments following Public Meeting (February 2019)
- G] Illustrates the growth in vehicle miles in Suffolk between 1993 and 2019, alongside the long term trend.



- H] Department for Transport confirmatory 'good practice' letter in respect to TAG Holiday Centres
- I] Graphic showing the Sizewell site's size relative to other nominated sites
- J] AECOM Peer Review of Option Selection for Sizewell Link Road (April 2019 Draft)
- K] AECOM Sizewell C, Route D2 and B1122 Study for Suffolk County Council (December 2014)