From:	Geoghegan, Simon
To:	North Killingholme Power Project; planning@northlincs.gov.uk
Cc:	contact@cgenpower.com; growthandplanning
Subject:	DCO EN010038 - North Killingholme Power Project
Date:	07 September 2020 12:00:44
Attachments:	DCO EN010038 - North Killingholme Power Project DCO - TM001 CH2M Review (JP Issued).pdf PINS - DCO EN010038 - North Killingholme Generating Project-1140 - Overhead lines at Elsham Worlaby.pdf

#### All

We have been consulted a non-material change to be made to:

The North Killingholme (Generating Station) Order 2014 (SI 2014/2434) as corrected by The North Killingholme (Generating Station) (Correction) Order 2015 (SI 2015/1829).

In respect of the request to extend the deadline for commencement of the authorised development by five years, the response by Highways England is 'No Objection' (attached). Our Technical Memorandum is also attached

Highways England would wish to make the following comment in respect of construction of this development:

 It is considered by WSP that alternative working hours could be used to minimise the impacts of the development at the peak of construction and encourage peak spreading. It is considered that such an approach is welcomed by CH2M; however, there is no mechanism for the proposed peak spreading of trips to be ensured, and as such, it is considered that further details should be presented as to how peak spreading will be achieved, and monitored. It is not considered that the above is overly onerous or insurmountable and could possibly be presented within the CEMP and TP.

With Regards

During the Coronavirus Pandemic in common with many of my colleagues I am working from home and no messages should be left on the Lateral Phone Number.

Simon Geoghegan, Planning and Development Highways England | Lateral | 8 City Walk | Leeds | LS11 9AT

Web: <u>http://www.highways.gov.uk</u>

This email may contain information which is confidential and is intended only for use of the recipient/s named above. If you are not an intended recipient, you are

hereby notified that any copying, distribution, disclosure, reliance upon or other use of the contents of this email is strictly prohibited. If you have received this email in error, please notify the sender and destroy it.

Highways England Company Limited | General enquiries: 0300 123 5000 |National Traffic Operations Centre, 3 Ridgeway, Quinton Business Park, Birmingham B32 1AF | <u>https://www.gov.uk/government/organisations/highwaysengland</u> | <u>info@highwaysengland.co.uk</u>

Registered in England and Wales no 9346363 | Registered Office: Bridge House, 1 Walnut Tree Close, Guildford, Surrey GU1 4LZ

Consider the environment. Please don't print this e-mail unless you really need to.



## **Developments Affecting Trunk Roads and Special Roads**

## Highways England Planning Response (HEPR 16-01) Formal Recommendation to an Application for Planning Permission

- From: Divisional Director Operations Directorate Highways England. North East Region
- To: Planning Inspectorate
- CC: growthandplanning@highwaysengland.co.uk

Reference: DCO EN010038

Referring to an application for A NON-MATERIAL CHANGE TO BE MADE TO: THE NORTH KILLINGHOLME (GENERATING STATION) ORDER 2014 (SI 2014/2434) AS CORRECTED BY THE NORTH KILLINGHOLME (GENERATING STATION) (CORRECTION) ORDER 2015 (SI 2015/1829), TO GRANT AN EXTENSION OF FIVE YEARS,

notice is hereby given that Highways England's formal recommendation is that we:

- a) offer no objection;
- b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A Highways England recommended Planning Conditions);
- c) recommend that planning permission not be granted for a specified period (see Annex A further assessment required);
- d) recommend that the application be refused (see Annex A Reasons for recommending Refusal).

Highways Act Section 175B is / is not relevant to this application.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Where relevant, further information will be provided within Annex A.

This represents Highways England formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should you disagree with this recommendation you should consult the Secretary of State for Transport, as per the Town and Country Planning (Development Affecting Trunk Roads) Direction 2018, via <u>transportplanning@dft.gov.uk</u>





# North Killingholme Power Project – DCO Application – CH2M Review

PREPARED FOR:	Simon Geoghegan / Donna Newsome (Highways England)
PREPARED BY:	Jonathan Parsons (CH2M)
DATE:	4 September 2020
PROJECT NUMBER:	679066.AA.20.13.10 DevHU0044
DOCUMENT REF:	TM001
REVIEWED / APPROVED BY:	Simon Snow (CH2M)

## Task Overview

CH2M has been tasked by Highways England to review a Development Consent Order [DCO] application for a non-material change to the North Killingholme (Generating Station) Order by C.GEN Killingholme Ltd, for an extension of time to the current DCO. The proposal, consented in 2014, is for a new thermal generating station that will operate either as a Combined Cycle Gas Turbine [CCGT] plant or as an Integrated Gasification Combined Cycle [IGCC] plant, with a total electrical output of up to 470MWe.

The development proposals are located in North Killingholme and, as such, there is potential for them to impact upon the capacity, operation and safety of the immediate Strategic Road Network [SRN], namely the A160 and A180 / M180. As such, this Technical Memorandum [TM] has been prepared to consider the DCO application in the context of the SRN, with a summary and conclusions provided at the end of this TM.

In April 2020, CH2M reviewed WSP Technical Note 2 [the Note] which was stated as being prepared to inform North Lincolnshire Council [NLC], North East Lincolnshire Council [NELC] and Highways England of the current status of and proposed amendments to the project.

WSP stated that the Note explains that the proposed extension of time would not result in a material change to the development impacts and the existing mitigation is sufficiently flexible to manage the impacts of the construction scenarios.

CH2M's review of the Note concluded that whilst the development proposals may not be changing materially since the DCO was awarded, it should not be assumed by WSP that the baseline conditions have also not changed materially since 2014 when the transport impacts of the development proposals were last assessed.

The review of the Note informed further scoping discussions with WSP to agree the transport parameters of the subsequent DCO submission. Appendix 8.1 of the Environmental Statement is the Transport Statement [TS], produced by WSP, and the review of the TS forms the basis of this TM. The contents of the TS are reviewed in the order in which the issues are presented.

## DCO Application Review

It is stated that Requirement 2 of the 2014 DCO states that the authorised development shall commence no later than the expiration of seven years beginning with the date that the DCO came into

force (i.e. 1 October 2021). It is now stated that the applicant now wishes to apply for a non-material change to extend the timeframe by which the authorised development shall commence, to allow the applicant a further period of 5 years to implement the consent, expiring in October 2026. These intentions for the applicant are reflective of the scoping discussions held to date with WSP.

It is stated that the TS sets out the agreed approach to update the baseline and provides updates relating to policy and committed highway improvement schemes. Furthermore, it is stated that the TS acknowledges that the baseline has changed with respect to increased available capacity and volume of traffic flows, however, it concludes that the existing embedded mitigation is sufficiently flexible to manage the impacts of the construction scenario's traffic impacts.

The TS also makes reference to including flexibility to review the option of offsetting shift patterns, deliveries of material, and export of waste; routing trips to evenly distribute the traffic impact across the routes to the site, and implementation of a range of sustainable measures to reduce the number of vehicle trips.

## Policy, Legislation and Guidance

It is noted by CH2M that DfT Circular 02/2013 has been included in this section of the TS, and this is welcomed. Furthermore, this section concludes that it is considered by WSP that there have been no material changes to national or local policy that would have a material impact on the project. This is accepted by CH2M.

## Extent of Study Area

The TS states that in pre-application discussions with NLC, NELC, and Highways England it was agreed that the extent of the study area should extend to include the following junctions:

- A180/A160 Interchange (Junction 1);
- A160 Humber Road / Habrough Road Roundabout (Junction 2);
- A160 Humber Road / Eastfield Road Junction (Junction 3);
- A160 Humber Road / A1173 Manby Road Roundabout (Junction 4);
- A1173 / Kings Road Roundabout (Junction 5);
- A1173 / Kiln Lane Roundabout (Junction 6);
- A180 / A1173 Grade Separated (Junction 7);
- Chase Hill Road / Rosper Road (Junction 8); and
- Chase Hill Road / Eastfield Road (Junction 9).

Furthermore, it is stated that the study area covers all junctions assessed as part of the DCO, and that the changes to the baseline conditions and development trips are considered in the following sections. CH2M confirm that the study area presented is as agreed during scoping.

#### Highway Network – Improvement Schemes

The TS sets out the following highway improvement schemes which have been delivered by Highways England and partners since the DCO was consented in 2014:

- Upgrading the A180 / 160 grade-separated junction to an oval roundabout arrangement;
- A160 duelled between A180 / A160 Interchange and Eastfield Road Junction;
- Relocating the A160 / Habrough Road roundabout to the west of its current position and upgrading it to a five-arm roundabout with new links provided from the A160 and Ulceby Road;
- New bridge over A160 between Town Street and Woods Lane removing north-south movements

- Upgrading the A160 / Manby Road roundabout junction to form gyratory roundabout with new links to Humber Road/Rosper Road; and
- New southern arm on A180/A1173 Stallingborough Interchange.

Furthermore, it is stated within the TS that the following highway improvement schemes are under construction:

- South Humber Bank Link Road currently under construction and is anticipated to be completed by February / March 2021; and
- Upgrading the existing Chase Hill / Eastfield Road priority junction to a four-arm roundabout, with a new arm which would provide access to the Able Logistics Park.

In addition, the following highway improvement schemes are planned as part of the Able Logistics Park and Able Marine Energy Park developments, and also set out in the TS:

- Modifications to the A160 Humber Road / Eastfield Road junction to widen the Eastfield Road (N) arm to provide an extra lane and to extend the existing approach lanes from the A160 eastbound; (not yet delivered); and
- As part of the Able Marine Energy Park development, a proposed improvement scheme has been developed for the A1173 / Kiln Lane junction. The proposed scheme includes plans to extend the existing second lane increase stacking capacity on the A1173 western approach (not yet delivered).

It is noted by WSP, however, that the schemes which have yet to be delivered are not likely to be forthcoming in the near future, as advised by NLC.

WSP state that it is considered that the highway improvement schemes delivered since the DCO was granted, those under construction, and those committed will increase capacity available on the network. CH2M agree with the conclusion drawn.

#### Baseline Traffic Flows

In order to establish the baseline traffic conditions on the local road network and SRN several sources of data were reviewed by WSP, including:

- Webtris;
- Traffic Surveys; and
- Highways England Traffic Forecast Growth Report.

In addition to the above, it is stated that baseline data traffic data from committed developments was used in the analysis of the development impacts.

#### Webtris

It is stated that Table 5-1 contains Average Weekday Traffic volume data extracted from Webtris count stations on the A160 for a range of time periods for data recorded in 2011 and 2019. This indicates there has been between 9.4% and 11.6% growth on the network on an average weekday between 2011 and 2019.

#### Average Weekday (Hourly Traffic Flows)

Within the TS, Table 5-2, Table 5-3, and Table 5-4 contain hourly traffic volume data extracted from Webtris count stations on the A160 recorded in 2019 during the morning (06:00 - 10:00), evening (16:00 - 20:00), and interpeak (10:00 - 16:00) time periods. It is stated that this data has been filtered to only include data collected during a neutral month (March – November, excluding August), school

term time excluding the first and last week of term based on NLC / NELC school calendar, and Monday to Thursday.

Table 5-2 indicates the morning peak is 07:00 - 08:00 as assessed in the DCO. Furthermore, it is stated that it can be also seen that in the hour before and after the morning peak hour the volume of traffic is 22% and 38% lower respectively, indicating there is capacity to utilise demand management measures to mitigate temporary construction traffic impacts.

Table 5-3 indicates the evening peak is 16:00 - 17:00 as assessed in the DCO. Furthermore, it is stated that it can be also seen that in the hour before and after the evening peak hour the volume of traffic is 16% and 7% lower respectively, indicating there is capacity to utilise demand management measures to mitigate temporary construction traffic impacts.

Table 5-4 contains the volume of traffic during the interpeak period. It is stated in the TS that it can be seen that the traffic flows are significantly lower than the morning and evening peak periods indicating there is capacity in the network to utilise demand management measures to mitigate temporary construction traffic impacts during the interpeak period.

In summary, it is stated within the TS that the data extracted from Webtris indicates the morning peak is 07:00 - 08:00 and the evening peak is 16:00 - 17:00. The data also indicates there is capacity on the shoulders of the peak hours and throughout the day to utilise demand management measures to manage the impacts of the peak activity by concentrating activity away from the morning and evening peak hours.

Having reviewed the information presented, CH2M accept the peak hours identified within this section of the TS; and concur with the statement regarding capacity being available outside of the peak hours. However, it is noted that no reference is made to available capacity within the identified peak hours.

#### Traffic Surveys

It is stated that, in order to establish the baseline traffic conditions on the local road network, classified traffic count surveys were also undertaken to cover the anticipated peak trip generation periods associated with the development proposals. As such, fully classified turning counts were undertaken at the following junctions:

- A180 / A160 Interchange (Junction 1);
- A160 Humber Road / Habrough Road Roundabout (Junction 2);
- A160 Humber Road / Eastfield Road Junction (Junction 3);
- A160 Humber Road / A1173 Manby Road Roundabout (Junction 4);
- A1173 / Kings Road Roundabout (Junction 5);
- A1173 / Kiln Lane Roundabout (Junction 6);
- A180 / A1173 Grade Separated (Junction 7); and
- Chase Hill Road / Rosper Road (Junction 8).

It is stated that the traffic surveys were undertaken on Wednesday 19th June 2019 between 06:00 and 22:00; and that the traffic flows indicate the network morning peak is 06:45 - 07:45, which is stated as being broadly in accordance with the data extracted from Webtris.

In addition, the TS states that the traffic flows also indicate that the network evening peak is 17:00 - 18:00, which is noted as being later than indicated by the data extracted from Webtris count stations located on the A160.

In relation to this, it is stated that further investigation of the traffic surveys indicated that traffic flows remained stable between 16:15 and 18:00 before reducing after 18:00; and it is stated that the

difference in total flows across the network during each whole hour within this time period is less than 3.5%.

Given the above, it is stated by WSP that based on the peak hours associated with the development trips, it is considered reasonable to analyse the 07:00 - 08:00 and 16:00 - 17:00 time periods as per the assessment contained in the DCO. Having considered the information presented within the TS, the peak hours are considered acceptable for use.

## Highways England Traffic Forecasting Report – A160 / A180 Port of Immingham Improvements

It is stated within the TS that the Traffic Forecasting Report prepared for Highways England A160 / A180 Port of Immingham Improvement scheme was prepared to assess the economic and environmental impacts of the scheme and concludes that the data was suitable for the preliminary design of the A160 / A180 corridor upgrades.

The model included a review of the morning peak (07:00 - 08:00), evening peak (1600 - 1700, and interpeak (1000 - 1600) periods for the opening year of 2016, intermediate year, design year of 2031, and final year of 2041 for the do minimum and do something networks.

In addition, the Forecasting Report also included a range of forecast scenarios, including Core Tempro Scenario, Core Scenario, High Growth, and Low Growth. The Core Scenario was considered the most realistic and included Able development and Port Growth unconstrained by Tempro.

WSP state that the traffic forecasts were developed for use in the preliminary and detailed design of the A160 / A180 Port of Immingham Improvement scheme, therefore it is considered that the highway improvements have allowed for significant growth and development up to 2031, with the longer term forecasts up to 2041 also considered therefore covering development over the next 21 years.

It is considered by CH2M that this is a reasonable view to take regarding network capacity in the vicinity of the development proposals, given the available information.

The TS stated that the 2031 Do Something - Core Scenario and 2031 Do Something - High Scenario forecast link flows are included at Appendix A for the morning and evening peak hours as a benchmark for the reviewing the traffic impacts associated with the development proposals, and this is reviewed later within this TM.

#### **Proposed Development**

The previous DCO application considered the following scenarios:

- Scenario A Construction of Power Island and Common Facilities only;
- Scenario B Operation of Generating Station as CCGT Plant;
- Scenario C Construction of Power Island with the Gasification Plant and Common Facilities;
- Scenario D Operation of Generating Station as CCGT Plant with subsequent construction of the Gasification Plant; and
- Scenario E Operation as an IGCC Plant.

It is stated that it was agreed at the time with NLC, NELC and Highways England that operational assessments of the construction scenarios (A, C, and D), with the operational scenarios (B and E) were considered to have a negligible traffic impact and therefore no further junction analysis of these scenarios was undertaken. This position was agreed within the signed Statement of Common Ground, which was circulated and agreed between all parties during pre-application discussions. CH2M confirms this is the agreed position.

## **Construction Programme and Assessment Years**

The TS states that it is anticipated construction could commence on site as early as Q1 2022 and based on the construction programme, this would result in the construction peaks occurring in 2023 and 2026. However, it is recognised by WSP that a five-year extension would allow the applicant to commence works up to 2026. As such it is proposed to assess a start date of in the middle of this time period i.e. 2023/24, which would result in peak construction years of 2025 and 2028 respectively based on the following programme of works:

- Scenario A Construction of Power Island and Common Facilities only. The construction period for this scenario is approximately 26 months, with peak construction activity taking place 18 months into the programme. Assuming a start date during 2023, the peak of construction would be in 2025.
- Scenario C Construction of Power Island with the Gasification Plant and Common Facilities. The construction period for this scenario is approximately 36 months, with peak construction activity taking place 24 months into the programme. Assuming a start date during 2023, the peak of construction would be in 2025.
- Scenario D Operation of Generating Station as a CCGT Plant with subsequent construction of the Gasification Plant. The construction period for this scenario is in two phases. The first phase commences in 2023 as set out in Scenario A and the second phase 2027 with the peak of construction 12 months later during 2028.

It is considered by WSP that the above assessment years represents a robust scenario for progressing discussions on the impacts of the extension of time to the DCO and state that this has been agreed with NLC, NELC, and Highways England. CH2M can confirm that this is the case.

#### Construction Workers – Shift Pattern

During construction, it is stated by WSP that it is expected that there would be between 600 and 1,600 construction workers on site. In accordance with the DCO, it has been assumed by WSP that all employees would arrive on site between 06:00 and 10:00 and depart the site between 16:00 and 20:00.

Within the TS, Table 6-1 contains the distribution of construction worker traffic across the peak hour periods. Table 6-1 also contains an alternative arrival / departure profile based on offsetting the construction workers start / finish time within the construction working hours (07:00 – 19:00, Monday to Saturday) to reduce the developments impacts in the morning and evening peaks.

It is stated that the alternative proportions show the distribution of trips in the morning peak brought forward by one hour but adjusted so the earliest arrival takes place between 06:00 - 07:00 in line with the construction working hours. In the evening peak, the distribution has been brought forward by one hour with no adjustment. It is considered that alternative working hours could be used to minimise the impacts of the development at the peak of construction and encourage peak spreading.

Such an approach is welcomed by CH2M. However, there is no mechanism for the proposed peak spreading of trips to be ensured, and as such, it is considered that further details should be presented as to how peak spreading will be achieved, monitored, and actively encouraged.

## Predicted Trip Generation, Distribution and Assignment

The TS stated that the Environmental Statement and Transport Assessment submitted with the DCO considered the vehicle trip generation associated with each of the development scenarios; the parameters used to derive the number of vehicle trips associated with each development scenario comprised the following:

• Number of construction workers;

- Number of operational workers;
- Number of HGVs; and
- Number of LGVs.

A summary of the three construction related development scenarios (A, C, D) and their respective daily trip generations are outlined below:

- Scenario A (Construction of Power Island and Common Facilities only) will generate the lowest number of construction worker trips at 600, no operational staff trips, 150 HGVs and 35 LGVs;
- Scenario C (Construction of Power Island with the Gasification Plant and Common Facilities) anticipated to generate the highest number of construction worker trips at 1,600 which was anticipated to generate 500 HGVs, 120 LGVs and no operational staff trips; and
- Scenario D (Operation of Generating Station as CCGT Plant with subsequent construction of the Gasification Plant) anticipated to generate 1,000 construction worker trips, 35 operational staff trips, 250 HGVs and 85 LGVs.

It is stated that the vehicle trip generation agreed as part of the DCO remains the same within the current application. As such, it is considered by CH2M that the trip generation represents a non-material change from the previous DCO application as the trip generation profile is remaining consistent.

#### Tempro Growth Factors

The TS states that Tempro growth factors have been derived based on the National Trip End Model 7.2 dataset and the National Transport Model Dataset AF15. The 'urban - all roads' for North Lincolnshire 004 and North East Lincolnshire 001 area have been considered are shown in Table 6-3 and Table 6-4 for each of the assessment years.

Table 6-3 and Table 6-4 indicate the growth factor for North Lincolnshire 001 is marginally higher for all assessment years and therefore this has been applied by WSP across the study area. Additionally, it is stated that the 2019 traffic flows have been factored to the peak construction year of 2025 and 2028.

CH2M consider the approach taking to deriving future assessment years is acceptable.

#### **Committed Development**

A review of committed development has been undertaken and is included at Appendix C. to the TS. It is stated that this builds on the assessment included in the original Scoping Note with the addition of the developments requested by NELC on 15th April 2020. It is considered by CH2M that Highways England should defer to NELC on the issue of committed development to be included within the assessment.

It is stated that it should be noted the South Humber Link Road is included separately as WSP have only been able to source traffic flows in PCUs. Furthermore, the TS states that the South Humber Link Road brings significant benefits to the eastern part of the study area with reduced traffic flows between the A180 / A1173 Stallingborough interchange and A1173 Kiln Lane roundabout, offsetting a large of proportion of the increase in trips associated with committed development. This is noted by CH2M and accepted.

#### Traffic Impact Assessment - Junctions

#### Morning Peak (07:00-08:00)

Table 7-1 summarises the total volume of traffic (vehicles) through each of the junctions within the study area during the morning peak. Table 7-2 summarises the predicted increase at each of the junctions within the study area for the morning peak.

WSP states that Table 7-2 confirms the construction traffic equates to between 2% and 10% of the predicted traffic through the junctions within the study area. Furthermore, WSP state that it is considered that this is within the daily variation of the junctions and could also be managed through demand management measures contained in the embedded mitigation.

#### Evening Peak (16:00 – 17:00)

Table 7-3 summarises the total volume of traffic (vehicles) through each of the junctions within the study area during the evening peak. Table 7-4 summarises the predicted increase at each of the junctions within the study area for the evening peak.

WSP states that Table 7-4 confirms the construction traffic equates to between 3% and 15% of the predicted traffic through the junctions within the study area. Furthermore, it is considered by WSP that although greater than the daily variation in traffic on Junctions 1 - 3, it is considered that the temporary nature of the impacts are not severe given the increased capacity since the granting of the DCO.

CH2M concur with the conclusions drawn by WSP.

#### Link Flows

In addition to an assessment of the developments impacts at junctions within the study area, an analysis of the predicted link flows has also been undertaken in order to compare the traffic flows with those previously assessed in the DCO and those used in the preliminary and detailed design of the A160 / A180 Port of Immingham Improvements. This analysis included the following links within the study area:

- Link 1a / 1b A180 (North of Junction 1);
- Link 2a / 1b A180 (Junction 1 to Junction 7);
- Link 3a / 1b A180 (South of Junction 7);
- Link 4a / 1b A160 (Junction 1 to Junction 2);
- Link 5a / 1b Ulceby Road (North west of Junction 2);
- Link 6a / 1b East Halton Road (North of Junction 2);
- Link 7a / 1b A160 Humber Road (Junction 2 to Junction 3);
- Link 8a / 1b Habrough Road (South of Junction 2);
- Link 9a / 1b Eastfield Road (North of Junction 3);
- Link 10a / 1b A160 Humber Road (Junction 3 to Junction 4);
- Link 11a / 1b Eastfield Road (South of Junction 3);
- Link 12a / 1b Humber Road / Rosper Road (North East of Junction 4);
- Link 13a / 1b A1173 Manby Road (Junction 4 to Junction 5);
- Link 14a / 1b Kings Road (east of Junction 5);
- Link 15a / 1b A1173 (Junction 5 to Junction 6);

- Link 16a / 1b Kiln Lane (East of Junction 6);
- Link 17a / 1b Private Access (South of Junction 6);
- Link 18a / 1b A1173 (Junction 6 to Junction 7); and
- Link 19a / 1b A1173 (West of Junction 7).

The comparison indicates that the link flows are between 22% and 31% higher for the corresponding scenario assessed as part of the original consent i.e. 2016/2025 and 2019/2028. It is stated by WSP that this level of change appears reasonable given the length of time between the assessment years and increased capacity within the study area.

In addition, it is stated that a comparison has also been undertaken comparing the predicted traffic flows to Highways England Traffic Forecast Growth Report. WSP state that this indicates the overall network flows are lower in 2025 and 2028 compared to the growth outlined in the Forecasting Report used to design the upgrades, therefore, it is considered that the temporary impacts associated with the development proposals fall within the design parameters of the upgrade. Having reviewed the information provided in the TS, CH2M agrees with the conclusion drawn.

#### Traffic Impact – Mitigation

#### 2014 DCO-Approved Mitigation

It is stated that the DCO included details of how the elements of the authorised development to be constructed would be governed by the following documents:

(i) The Construction Environmental Management Plan [CEMP];

(ii) A Travel Plan [TP] for construction workers and a travel plan for operational workers which has been submitted to and approved by the relevant planning authority;

(iii) A management plan for construction traffic addressing construction traffic, HGV movements and abnormal loads which has been submitted to and approved by the relevant planning authority; and

(iv) A management plan for operational transport which has been submitted to and approved by the relevant planning authority.

The TS states that the controls represented by these documents remains valid and it is proposed they will be updated to reflect latest best practice and local conditions prior to construction beginning. It is considered by WSP there is sufficient flexibility to amend the above documents and respond to the changes in the baseline conditions and construction programme. The TS states that this approach has been agreed with NLC, NELC and Highway England, and this is confirmed by CH2M.

#### 2020 Non-Material Application – Updated Mitigation

It is considered by WSP that the approved mitigation could be updated to include the following:

- Route Choice (Workers) agreements for staff currently all employee trips turn left at Eastfield Road - use information to encourage split between routes East Halton Road / Humber Road / Eastfield Road;
- Offset Shift patterns (Workers) The trip generation is based on the total number of trips proportioned by total volume of traffic on the road network between 06:00 10:00 and 16:00 20:00, with the peak coinciding with the network peak hour. It is considered that trips could be offset so staff arrive and depart before or after the morning and evening peaks as discussed earlier within the TS;

- Construction Vehicles Import of construction materials and export of waste material. Greater emphasis could be placed on encouraging trips in the inter peak period when traffic volumes are significantly lower. This would include the use of laydown areas within the site; and
- Sustainable Travel Measures Implementation of sustainable measures to reduce the number of vehicle trips, this could include a range of initiatives and could be monitored.

In addition, it is stated that any other measures considered reasonable and proportionate to the traffic impacts associated with the peak construction year would be considered by the applicant at the time of updating the embedded mitigation. Such an approach is supported by CH2M.

It is also stated that it has been agreed with NLC, NELC, and Highways England that these documents can be updated with specific details of the mitigation measures taken forward prior to the commencement of construction and a contractor has been appointed. This is confirmed by CH2M.

#### TS Conclusion

In conclusion, it is acknowledged by WSP that the baseline scenario has changed since the DCO was granted. However, given the increased highway capacity, the temporary nature of the construction traffic flows, it is considered by WSP that the application to extend the period of time to implement the DCO would not result in a severe impact to the operation of the highway network and the environmental impacts would not be materially different to those in the consented DCO.

## Summary and Conclusions

CH2M has been tasked by Highways England to review a Development Consent Order application for a non-material change to the North Killingholme (Generating Station) Order by C.GEN Killingholme Ltd. The proposal, consented in 2014, is for a new thermal generating station that will operate either as a Combined Cycle Gas Turbine plant or as an Integrated Gasification Combined Cycle plant, with a total electrical output of up to 470MWe.

The development proposals are located in North Killingholme, and as such, there is potential for them to impact upon the capacity, operation and safety of the SRN, namely the A160 and A180 / M180. As such, this Technical Memorandum has been prepared to consider the DCO application in the context of the SRN.

In April 2020, CH2M reviewed WSP Technical Note 2 which was stated as being prepared to inform North Lincolnshire Council, North East Lincolnshire Council and Highways England of the current status of and proposed amendments to the project.

WSP stated that the Note explains that the proposed extension of time would not result in a material change to the development impacts and the existing mitigation is sufficiently flexible to manage the impacts of the construction scenarios.

CH2M's review of the Note concluded that whilst the development proposals may not be changing materially since the DCO was awarded, it should not be assumed by WSP that the baseline conditions have also not changed materially since 2014 when the transport impacts of the development proposals were last assessed.

Appendix 8.1 of the Environmental Statement is the Transport Statement, produced by WSP, and the review of the TS forms the basis of this TM. On the basis of this review, the recommendation to Highways England in relation to this development proposals is:

#### No objection – although noting the assessment deficiencies (as identified below)

This review has highlighted the following deficiencies as follows:

1) It is considered by WSP that alternative working hours could be used to minimise the impacts of the development at the peak of construction and encourage peak spreading. It is

considered that such an approach is welcomed by CH2M; however, there is no mechanism for the proposed peak spreading of trips to be ensured, and as such, it is considered that further details should be presented as to how peak spreading will be achieved, and monitored.

It is not considered that the above is overly onerous or insurmountable and could possibly be presented within the CEMP and TP.