



ENVIRONMENTAL STATEMENT – VOLUME 3 – APPENDIX 5.3

Traffic Flow Diagrams

Drax Bioenergy with Carbon Capture and Storage

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations, 2009 - Regulation 5(2)(a)

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Applicant: Drax Power Limited

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PUBLIC

CLIENT	DRAX POWER LIMITED																																																			
PROJECT NAME	DRAX BECCS DCO																																																			
PREPARED BY	BP																																																			
CHECKED BY	PW																																																			
APPROVED BY	VH																																																			
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SPREADSHEET REFERENCE	TA Traffic Flow Diagrams PCU v0.3.xlsx																																																			
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NOTES																																																				
Traffic Surveys	<p>Traffic surveys for Junctions 1,2,3,5,6 and 7 are sourced from surveys used for the Drax Re-power DCO.</p> <p>These surveys were undertaken by MHC on 6th March 2018.</p> <p>The network peaks included in the traffic flow diagrams from the MHC surveys are from 07:45 - 08:45 and 16:30 - 17:30.</p> <p>The peak periods selected match the network peak periods used in the Drax Re-power DCO.</p> <p>Location of file: "\\uk.wspgroup.com\central data\Projects\700370xx\70037047 - DRAX Re-powering DCO-Yorkshire\03 WIP\Transport\Traffic Data\MHC-096-18 Selby - Turning Counts and Queues\MHC-096-18 Classified Junction Count - All Sites.xlsx"</p>																																																			
	<p>Traffic surveys for Junction 4a and 4b are sourced from surveys provided to WSP by National Highways.</p> <p>The survey was undertaken by NDC on Thursday 11th October 2018.</p> <p>The network peaks included in the traffic flow diagrams from the NDC surveys are from 07:15 - 08:15 and 16:30 - 17:30.</p> <p>The peak periods selected match the bold peak periods highlighted on the surveys in cell M115 for the AM Peak and M136 for the PM Peak.</p> <p>Location of file: "\\uk.wspgroup.com\central data\Projects\700720xx\70072063 - Drax BECCS DCO\03 Environment\05 Transport\4 - Received Information\2021-06-28 M62 J36 Highways England JTC and Q Data\M62 J36 CTC.xlsx"</p>																																																			
HGV Percentages	<p>MHC traffic surveys were used to calculate the HGV% for each turning movement for Junctions 1,2,3,5,6 and 7 for the AM and PM Peak periods.</p> <p>HGVs were categorised as OGV1, OGV2 and BUS/COACH</p> <p>LGVs were categorised as P/CYCLE, M/CYCLE, CAR, TAXI and LGV.</p> <p>NDC traffic surveys were used to calculate the HGV% for each turning movement for Junction 4 for the AM and PM Peak periods.</p> <p>HGVs were categorised as Rigid, Articulated and PSV.</p> <p>LGVs were categorised as CAR, LGV, MCL and PCL.</p>																																																			
TEMPro Growth Rates	<p>The TEMPro growth rates differ from those originally proposed within the EIA Scoping Report. TEMPro v7.2c was released after the submission of the EIA Scoping Report. The same methodology has been applied but the rates reflect the latest available forecasts and are therefore considered appropriate.</p> <p>Location: Selby and East Riding of Yorkshire</p> <p>NTM Adjusted (RTF 2018 Scenario 1 - Reference)</p> <p>Trip end origin / destination</p> <p>Area Type (Rural)</p> <p>Road Type (All)</p> <p>The National Transport Model (NTM) includes for committed developments and forecasts new household formed and jobs created. In order to avoid double counting, alternative assumptions have been applied to the future household and jobs forecasts to reflect that the peak hour traffic flows associated with a number of committed developments</p> <p>Based on the above, the TEMPro growth rates for 2018 - 2022 from Table 5.10 of the ES and the TEMPro growth rates from 2022 - 2026 from Table 5.12 of the ES have been used. Extracts from both tables are presented below.</p>																																																			
	<p>Table 5.10 - TEMPro Growth Factors</p> <table border="1"> <thead> <tr> <th>Assessment Years</th><th>Location</th><th>AM Peak</th><th>PM Peak</th><th>Weekday</th></tr> </thead> <tbody> <tr> <td>2018-2022</td><td>Selby</td><td>1.0368</td><td>1.0350</td><td>1.0359</td></tr> <tr> <td></td><td>East Riding</td><td>1.0339</td><td>1.0317</td><td>1.0338</td></tr> <tr> <td></td><td>Average</td><td>1.0354</td><td>1.0334</td><td>1.0349</td></tr> <tr> <td>2022-2026</td><td>Selby</td><td>1.0339</td><td>1.0332</td><td>1.0333</td></tr> <tr> <td></td><td>East Riding</td><td>1.0350</td><td>1.0292</td><td>1.0299</td></tr> <tr> <td></td><td>Average</td><td>1.0345</td><td>1.0332</td><td>1.0316</td></tr> </tbody> </table> <p>Table 5.12 - TEMPro Growth Factors (Alternative Assumptions)</p> <table border="1"> <thead> <tr> <th>Assessment Years</th><th>Location</th><th>AM Peak</th><th>PM Peak</th></tr> </thead> <tbody> <tr> <td>2022-2026</td><td>Selby</td><td>1.0340</td><td>1.0333</td></tr> <tr> <td></td><td>East Riding</td><td>1.0253</td><td>1.0238</td></tr> <tr> <td></td><td>Average</td><td>1.0297</td><td>1.0286</td></tr> </tbody> </table>	Assessment Years	Location	AM Peak	PM Peak	Weekday	2018-2022	Selby	1.0368	1.0350	1.0359		East Riding	1.0339	1.0317	1.0338		Average	1.0354	1.0334	1.0349	2022-2026	Selby	1.0339	1.0332	1.0333		East Riding	1.0350	1.0292	1.0299		Average	1.0345	1.0332	1.0316	Assessment Years	Location	AM Peak	PM Peak	2022-2026	Selby	1.0340	1.0333		East Riding	1.0253	1.0238		Average	1.0297	1.0286
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Committed Developments																																																				
Residential Development	<p>15/00305/STOUT</p> <p>Up to 838 New Homes - A164 Rawcliffe Road</p> <p>Vehicle trip generation rates have been taken from the Transport Assessment prepared for 21/03027/STPLF as it includes the residential development flows distributed across Junction 4a, 4b and Junction 3.</p>																																																			
Train Manufacturing Plant	<p>19/01430/STPLF</p> <p>Train Manufacturing Plant</p> <p>Vehicle trip generation rates taken from the Transport Assessment prepared for 21/03027/STPLF using the 'Committed Development - GOO-L Employment (Residual + Siemens Train Manufacturing Site) AM Peak (08:00-09:00)' and 'Committed Development - GOO-L Employment (Residual + Siemens Train Manufacturing Site) AM Peak (17:00-18:00)'</p> <p>Traffic flows to the west of the A614 / Services Road roundabout were split according to the turning proportions from the surveyed flows.</p>																																																			
Commercial Development	<p>21/03027/STPLF</p> <p>Erection of Employment Units - Rawcliffe Road Airmyn</p> <p>Vehicle trip generation rates have been taken from the Transport Assessment prepared for this application.</p>																																																			
Drive Thru Units	<p>21/00974/PLF</p> <p>Erection of a 'drive-thru' coffee shop and a 'drive-thru' restaurant</p> <p>Vehicle trip generation rates taken from the Transport Assessment prepared for 21/03027/STPLF.</p>																																																			
B8 Distribution	<p>Outline: 08/01710/STOUTE</p> <p>Reserved Matters: 18/03879/STREM</p> <p>Erection of a building for use as B8, B1(a) and B2, erection of an electricity substation, gas kiosk enclosure, security gatehouse, pump house</p> <p>Vehicle trip generation and distribution rates taken from outline application.</p> <p>Size of development taken from Reserved Matters Application (33,000 SQM)</p> <p>33,000 SQM from Reserved Matters Application has been applied to the trip generation from the outline application.</p> <p>The trip distribution methodology is based broadly on the trip distribution set out in the outline application, with 80% of trips to and from the M62 (but distributed according to the turning proportions at M62 Junction 36) and 5% of trips to and from the west of the M62 and then distributed according to the turning proportions.</p>																																																			
Eggbrough	<p>2019/1343/EIA</p> <p>Hybrid application for demolition of part of the former power station and ancillary buildings and its redevelopment (i) access into the site, internal roads, employment units, car parking, drainage infrastructure and landscaping and (ii) outline for the scale of redevelopment of the remainder of the site for employment floorspace</p> <p>Vehicle trip generation and distribution for the A63 / A1041 / Bawtry Road roundabout taken from Traffic Flow Diagrams contained within the Transport Assessment prepared for this application.</p> <p>Vehicle trip generation and distribution for the A63 / A162 roundabout taken from the arrival and departures on the westbound arm of the A19 / A63 roundabout. Arrival and departure trips were then split according to the respective turning proportions at the A63 / A162 junction. This is considered to be robust as it assumes all arrival and departures travelling westbound from the A19 / A63 roundabout will pass through the A63 / A1041 roundabout.</p>																																																			
Barlow Mound	<p>2022/0107/NYSCO</p> <p>EIA Scoping Opinion</p> <p>It is understood that the EIA Scoping Opinion is for the extraction of an additional 1,000,000 tonnes per annum, in which, 15% would be internally consumed and 85% would be exported off site.</p> <p>The intention would be to use road to export 65% of recovered material. However the EIA Scoping Opinion uses a 100% road scenario in provide for the vent that recovery by rail is not possible.</p> <p>Under a 100% export by road scenario, using 1.8 tonne HGVs and a 300 day working year, would equate to approximately 185 two-way HGV movements per day.</p> <p>The proposed hours of working are: 18 hours per day (06:00 - 00:00), seven days a week.</p> <p>The EIA Scoping Opinion states that the proposed distribution would be from Drax Power Station to the M62 Junction 36 via the A645 and A614. This distribution has been used in these traffic flow diagrams. Traffic flows at M62 Junction 36 has been split according to the turning proportions at the junction.</p>																																																			
All Committed Developments	Committed Development vehicle trips are split according to turning proportions for the remaining junctions within the study area.																																																			
LGV Development Traffic	All LGV development traffic was split according to the gravity model presented in the ES prepared for Drax-repower DCO and in the PEIR for the Drax BECCS DCO																																																			
HGV Development Traffic	All HGV development traffic has been split 80% / 20% between cars and minibuses with an average vehicle occupancy rate of 2.33 per vehicle and an average of 7 persons per minibus.																																																			
	All HGV development traffic is on a fixed route between the site entrance and the M62 via the A645 and A614.																																																			





























































































