

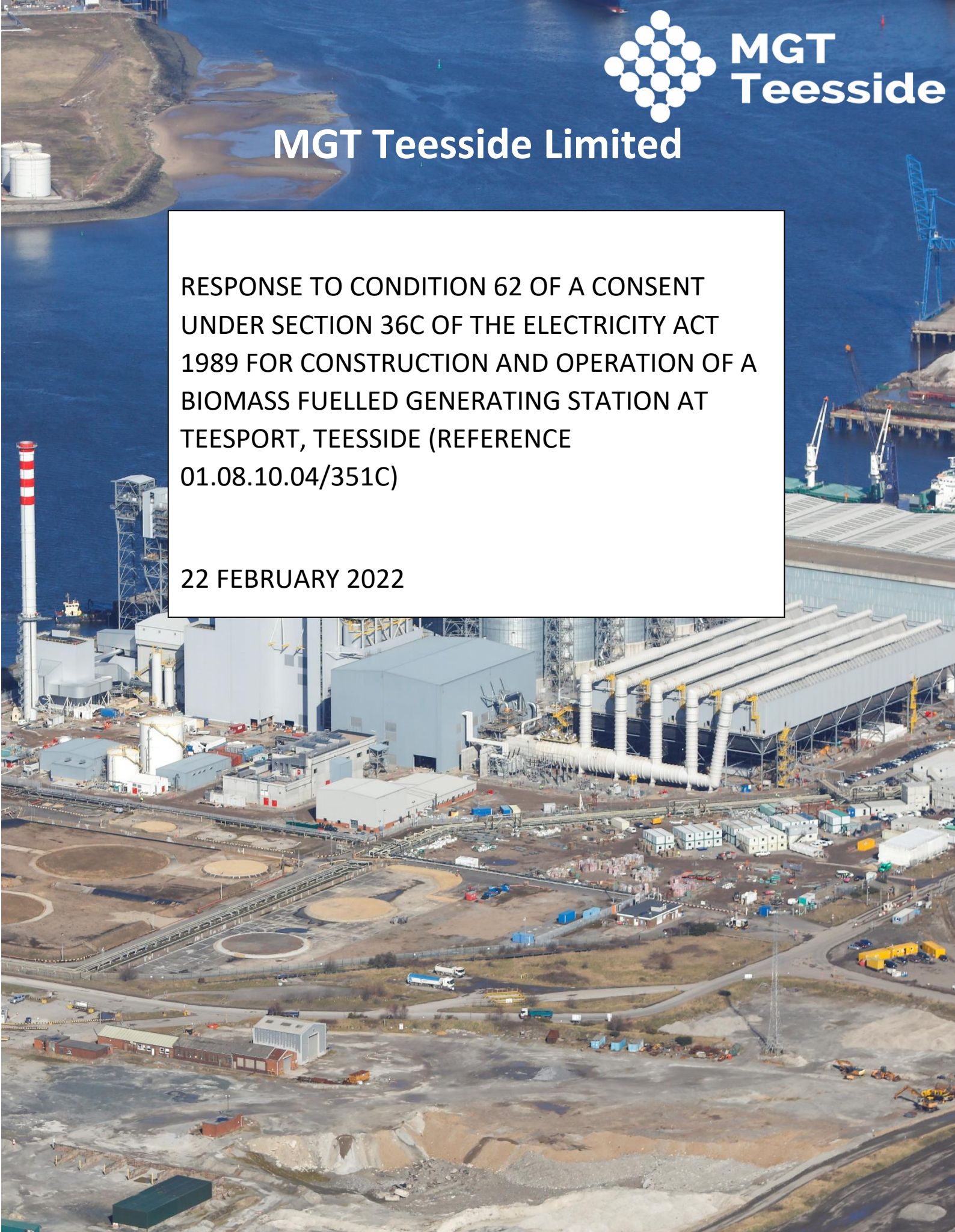


**MGT  
Teesside**

# MGT Teesside Limited

RESPONSE TO CONDITION 62 OF A CONSENT  
UNDER SECTION 36C OF THE ELECTRICITY ACT  
1989 FOR CONSTRUCTION AND OPERATION OF A  
BIOMASS FUELLED GENERATING STATION AT  
TEESPORT, TEESSIDE (REFERENCE  
01.08.10.04/351C)

22 FEBRUARY 2022



## TEES RENEWABLE ENERGY PLANT (PLANT)

RESPONSE TO CONDITION 62 OF A CONSENT UNDER SECTION 36C OF THE ELECTRICITY ACT 1989 FOR CONSTRUCTION AND OPERATION OF A BIOMASS FUELLED GENERATING STATION AT TEESPORT, TEESSIDE DATED 23th OCTOBER 2015 WHICH IS A VARIATION OF THE ORIGINAL SECTION 36 CONSENT DATED 15 JULY 2009 WITH REFERENCE 01.08.10.04/351C GRANTED TO MGT TEESSIDE LIMITED (MGT)

### TEESPORT PLANNING: CONDITION 62

#### 1. INTRODUCTION

This report is submitted to discharge condition 62 of the section 36C consent under the Electricity Act 1989 for the construction and operation of a biomass fuelled generating station at Teesport, Teesside (the Plant) dated 23th October 2015 which is a variation of the original section 36 consent dated 15 July 2009 with reference 01.08.10.04/351C.

Condition 62 requires:

*(62) At least 4 months prior to the operation of the Development, the Company must submit to and approve in writing with the Council a report on Combined Heat and Power (CHP) feasibility assessing potential commercial opportunities for the use of heat from the Development. The report must provide for ongoing monitoring and full exploration of potential commercial opportunities to use heat from the development as part of a Good Quality CHP scheme (as defined in CHPQA Standard issue 5), and for the provision of subsequent reviews of such opportunities as necessary.*

*Reason: To ensure that waste heat is available for use to the benefit of the local domestic, commercial and industrial users when the demand arises.*

#### 2. THE PLANT'S POTENTIAL FOR CHP

The plant has the potential to provide heat from steam turbine bleeding for steam extraction and from the main condensate line and / or condensate tank for condensate return allowing a heat load extraction of 11 MWth.

MGT will use part of that heat load in a wood chip dryer to order to dry locally sourced wood chips. The wood chip dryer is designed to receive and dry up to 50,000 tonnes per annum of wet wood chips (based on an anticipated 8,000 operating hours per annum). The wood chip dryer will be capable of accepting fuel with a moisture content of up to 60% (w/w) and reducing this down to 20% (w/w). The thermal load of the dryer will be approximately 3.7 MWth and this will load be met via steam extraction from the steam cycle of the plant at, typically, 130.6°C and 1.3 bar a.

In addition, to anticipate a case where a substantial CHP opportunity is identified the design of the Development allows for extraction of steam in different places and that sufficient space is set aside for the future installation of pipework. MGT has installed the necessary plant and pipework to enable the future supply of waste heat to the site perimeter.

Even though the Renewable Heat Incentive Scheme has been closed to new applicants MGT has grandfathered (up to March 2023) accreditations under Stage 1 and Stage 2 of the Renewable Heat Initiative and will complete Stage 3 accreditation once suitable heat opportunities have been identified. This grandfathering means MGT is very incentivised to obtain further heat customers.

### 3. CHP FEASIBILITY ASSESSMENTS

MGT has previously conducted two formal previous CHP feasibility assessments of the potential commercial opportunities for the use of heat from the Development – once in 2008 and once in 2015. These assessments considered opportunities from review of the UK CHP Development Map (available at <https://chptools.decc.gov.uk/developmentmap>). This report should be read alongside the previous reports which conducted a full review of the UK CHP Development Map.

As the review of the UK CHP Development Map has not provided any clear opportunities and though MGT has continued to review the UK CHP Development Map this assessment is based primarily on:

- The exploration of opportunities through direct contacts with local commercial entities;
- The exploration of opportunities through contacting regional planning bodies and local planning authorities to identify opportunities presented by emerging spatial planning strategies

### 4. DIRECT CONTACT WITH COMMERCIAL ENTITIES

The table below sets out the contacts MGT has directly made with commercial entities with heat needs.

Date	Company	Description			Comments	Progress
		Type of Business	Stage	Location		
Oct-17	<b>The Fresh Shrimp Company</b>	Aquaculture / Prawn farm	Pre-site selection	Unknown	Introduction made, were looking at viability of water source	did not revert
Oct-17	<b>REGEN Fuels Ltd</b>	Alternative Fuels Producer/Supplier	Pre-site selection	Unknown	Wanted to supply fuel from re-cycled waste to MGT	Suggested contact when plant enters full operation
					Wanted private wire power supply	
					Interested in possible low level steam supply	
Dec-17	<b>Sabic</b>	Tank farm	Speculative approach through PDT	Teesworks	Speculative Approach	No progress
Feb-18	<b>Covered under NDA</b>	Port / Storage	Existing business, looking at opportunities to optimise, reduce fossil fuel use etc.	PDT Estate	Heads of Terms signed	to be revisited when plant is operational
					3rd Party Feasibility Study produced	
					Opportunities to eventually replace existing fossil-fuelled space heating capacity	
					Cost savings calculated	
Feb-18	<b>Tesco</b>	Supermarket warehousing	Speculative approach through PD	PDT Estate	Asked PD to approach/introduce	No progress
	<b>Asda</b>					
	(through PDT)					

Apr-18	<b>Energy Company</b>	Bitumen production	Pre-site selection	PDT Estate	Heat and Power Requirements	data supplied - PDT did not progress
	(through PDT)				Information provided	
May-18	<b>Covered under NDA</b>	Recycled steel production	Site selection	Teesworks (former site of BOS Plant)	heat discussed but mostly concerned with private wire power	not taken forward
Oct-19	<b>Höegh LNG</b>	Exploring development of former Trafigura LNG Terminal	Pre-site selection	Near MGT plant	Cost estimate provided following	not taken forward
Mar-20	<b>STDC</b>	Development site	various	Teesworks	Follow up on introductory meeting	discussions followed, more interest in potential private wire
Oct-21	<b>LM Wind</b>	Wind turbine producer	Potential development on adjacent land	Teesworks	Speculative approach	To be progressed as project moves forward; LM wind still in discussion with Teesworks
	(GE Wind)					
Oct-21	<b>Green Lithium</b>	Automotive battery production	Site selection	Teesworks	Meeting held, data provided	No response since Dec-21
Jan-22	<b>Covered under NDA</b>	waste plastic reprocessing	Pre-site selection	Unknown	Data provided	discussing NDA

## 5. DIRECT CONTACT WITH REGIONAL PLANNING BODIES AND LOCAL PLANNING AUTHORITIES

MGT has liaised closely with regional planning bodies and local planning authorities to identify opportunities presented by emerging spatial planning strategies. In particular, MGT has liaised with the Strategic Growth Team within Regeneration Services at the Council and Tees Valley Unlimited (the Combined Authority) in relation to (i) district heating opportunities, (ii) development of Teesworks, a development of 4,500 acres of land adjacent to the MGT site; and (iii) assistance in connecting with exiting entities that may have a heat need. Each of these are reviewed below.

### (i) Combined Authority Initiatives with Redcar and Cleveland and Middlesbrough Borough Councils on District Heating Opportunities

Date	Discussions with Combined Authority	Description of Opportunity	Comments
January 2018	Southbank - aerobic digestion plant	Customers would be care homes and schools around Eston Grange.	This site was nearest to MGT plant. Discussion on whether if the aerobic digester was not functioning would MGT be able to provide an alternative source of heat. Combined Authority determined needing a 2 <sup>nd</sup> potential heat supplier rendered the project un-economic and so Combined Authority

			not taking project through to outline business case.
	Middlesbrough - aerobic digester with CHP.	Developer – Duranta, or ECO2, or ADs schemes being proposed close by.	Contracting for advisors. Scheme unlikely to require any further sources of heat.
	Kirkleatham		It was determined heat would be supplied from Wilton (Sabic).
	Middlesbrough Centre	Civic buildings and Teesside University and James Cook University Hospital	Potential Heat Sources were AD CHP & Biomass CHP. MGT was too far from the customers and James Cook had recently commissioned onsite incinerator

### (ii) Developments at Teesworks

The plant's ability to provide low carbon heat directly to facilities that are developed on land being developed by the South Tees Development Corporation (STDC) and referred to as the Teesworks site represents a significant opportunity and MGT has liaised with the Combined Authority to ensure alignment with potential occupiers of the land. The more significant discussions have been in relation to the following:

Though a number of other potential opportunities have been identified and discussed with the Combined Authority linked to the development of Teesworks these have not led to fruition partially as the commercial entities are still at development stage. Further users may be identified or indeed forth coming as the development of Teesworks continues.

The entities that MGT has directly contacted on Teesworks (i.e. not via the Combined Authority) are set out in section 4 above.

### (iii) Potential for Heat Use by Existing Companies

In relation to more established companies in the vicinity of the project the Combined Authority has advised that there is sufficient heat already identified at the Wilton site (including the Sembcorp assets) to serve the identified heat network within the area proximal to the project.

## 6. CONCLUSION OF ASSESSMENT

To conclude though no further viable CHP opportunities have as yet been identified (save for the woodchip dryer) further liaison with the Combined Authority and other commercial entities in the area continues.

## 7. FURTHER MONITORING AND REVIEW

As required under Condition 62 MGT will continue to monitor and explore potential commercial opportunities to use heat from the Development as part of a Good Quality CHP scheme and will provide details of any subsequent reviews as required by the Council.

**MGT TEESIDE LIMITED**  
**22 FEBRUARY 2022**