

**Report to the Cabinet Member for Environment, Planning and Cultural Services**  
**Report submitted by: Executive Director for Environment**  
**Date: 12 November 2013**

**Part I - Item No.**

Electoral Division affected:  
Thornton Cleveleys Central,  
Fleetwood West, Fleetwood  
East, Heysham

**Response to consultation on an Application under the Planning Act 2008 for a Development Consent Order to construct and operate the proposed Walney Extension Offshore Wind Farm and associated infrastructure**  
(Appendix 'A' refers)

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### **Executive Summary**

DONG Energy has submitted an application for a Development Consent Order to the Planning Inspectorate to build and operate an extension to the Walney Offshore Wind Farm. The proposed extension, located 17km off the Cumbrian coast, will have a capacity of up to 750 megawatts (MW). The proposed extension at its nearest point to the Lancashire Coast would be at a distance of about 35km. The proposed extension will be to the North West of the Walney 1 and 2 wind farms – these together with the West of Duddon Sands wind farm would largely screen the proposed extension. The proposed extension will be connected to the National Grid via underground cables coming ashore at Middleton and to a new substation located south east of Heysham adjacent to A683. As a statutory consultee the County Council is invited to make representations on the proposal and to submit a Local Impact Report (LIR) setting out the likely effects of the proposal on the local area.

The draft LIR is attached at Appendix 'A'.

### **Recommendation**

The Cabinet Member for Environment Planning and Cultural Services is asked to approve making representation to the National Infrastructure Directorate of the Planning Inspectorate stating that the County Council supports the proposal, taking account of the matters raised, and subject to the mitigation required, in the Local Impact Report.

## **Background and Advice**

On 28 June 2013, DONG Energy submitted an application for a Development Consent Order (DCO) to the National Infrastructure Directorate of the Planning Inspectorate (PINS) to build and operate an extension to the Walney Offshore Wind Farm, comprising between 93 and 207 turbines with a total generating capacity of up to 750 megawatts (MW), together with a new electricity substation and associated underground cabling at Heysham and Middleton. The proposed wind farm is located in the Irish Sea between Cumbria and the Isle of Man, about 19km west of the Isle of Walney, Barrow in Furness. The proposed extension at its nearest point to the Lancashire Coast would be at a distance of about 35km. The electricity generated will be exported via undersea cables, which will come ashore at Pott's Corner near Middleton, and buried cables to a new substation located south east of Heysham adjacent to A683.

The project consists of wind turbines, foundations, offshore substations, an onshore substation, offshore cables (connecting the turbines to offshore substations, and then exporting to the mainland), and onshore export cables.

As the proposed wind farm is an off-shore electricity generating station having a capacity of more than 100MW, it is a Nationally Significant Infrastructure Project (NSIP) within the terms of Sections 14 & 15 of the Planning Act 2008. The application for the Development Consent Order will therefore be determined by the Secretary of State, following consideration by PINS.

Lancashire County Council is a statutory consultee for this development alongside, Lancaster City Council, Cumbria County Council and South Lakeland District Council. Other local authorities within and adjoining the Lancaster and Lancashire areas (most notably Wyre Council and Blackpool Council) are also statutory consultees, but do not consider themselves impacted significantly by the development and have not been actively participating in the process.

The four local authorities mentioned above, together with Copeland Borough Council and Lake District National Park Authority, have been working together under the terms of a Planning Performance Agreement (PPA) to engage with DONG Energy in the pre-application process<sup>1</sup>. The PPA authorities have previously commented on the emerging proposals and the developer's consultation arrangements.

The PPA between the six local authorities and DONG Energy was signed in February 2013. This has assisted the local authorities in the preparation of all the documentation and assessments which are required as part of the Nationally Significant Infrastructure Project process. The PPA has enabled the County Council and the other authorities to commit the necessary level of resources to their participation in the project.

Within fourteen days of the DCO submission, the local authorities were required to respond to PINS, to give their views on whether the applicant had done what they said they were going to do in their Statement of Community Consultation (SoCC). A joint response was submitted on behalf of the PPA authorities, which concluded that

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<sup>1</sup> The County Council's participation in the PPA was agreed by the Cabinet Member for Economic Development, Environment and Planning on 28<sup>th</sup> September 2012.

adequate consultation had been undertaken in accordance with the relevant requirements of the Planning Act 2008.

Consultation has included events in Middleton and Heysham, and on the Fylde coast. The applicant has also made a formal presentation to County Council Members at a 'Bite Size Briefing' in November 2012. A final consultation event relating to the onshore elements of the scheme was held at Heysham Golf Club on 21<sup>st</sup> October 2013. At the event DONG set out how they would use the local supply chain and local employment during the Project's construction and operational phases.

PINS have confirmed that the Examination of the project will be held between 16<sup>th</sup> November 2013 and 12<sup>th</sup> May 2014. A key input into the Examination for the PPA authorities will be the submission of the Local Impact Report (LIR). The LIR provides a technical assessment of the effects of the development upon the local area and is based on the Environmental Statement produced by the applicant. It also takes into account amendments made to the project by the applicant in response to comments made by the PPA authorities and others with an interest in the project. The LIR has been prepared by the PPA authorities, with Cumbria County Council leading on the offshore impacts and Lancashire County Council leading on the onshore impacts.

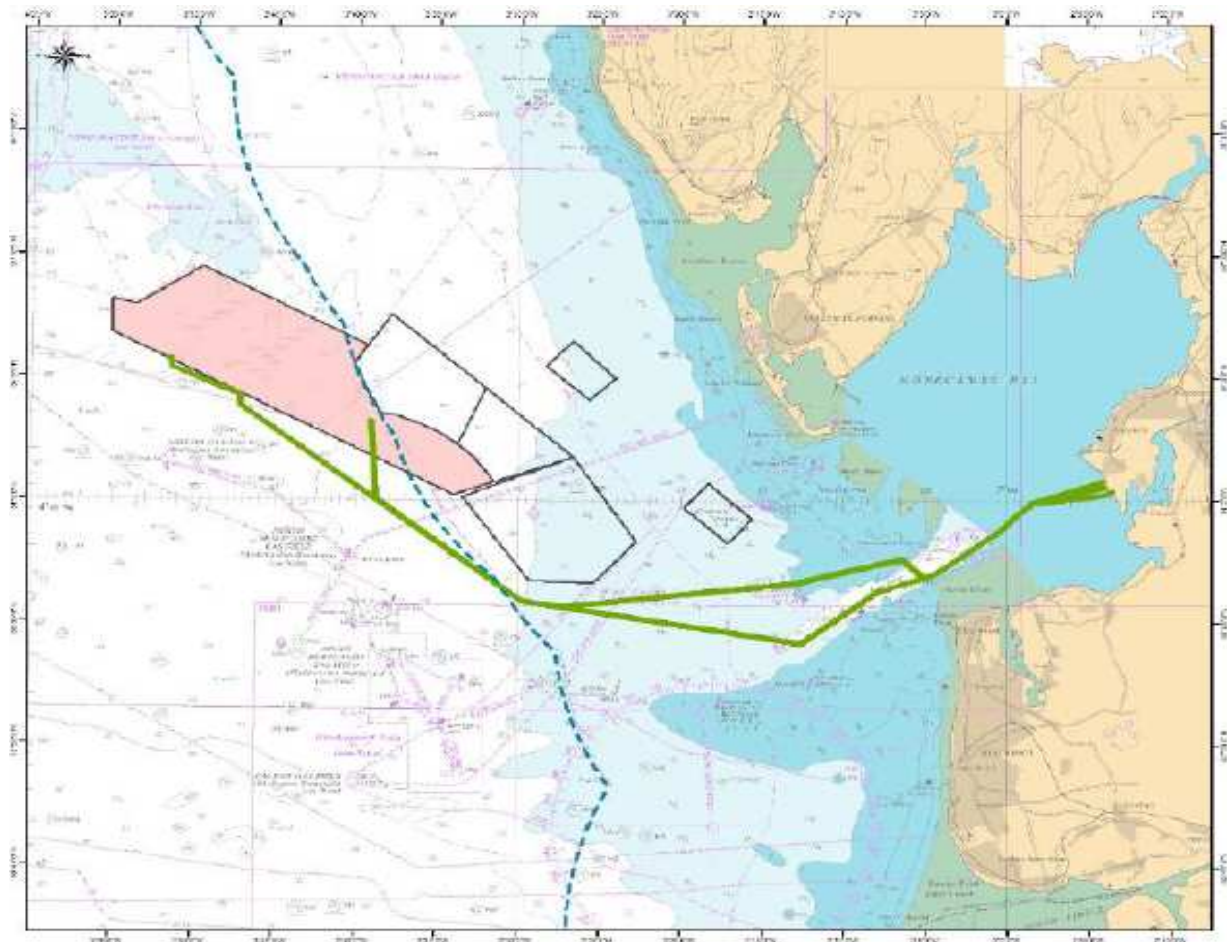
As a statutory consultee the County Council has the opportunity to make its own representations on the merits or otherwise of the proposal. The purpose of this report is to determine the contents of that representation.

## **The Proposal**

### **Site location and surrounding area**

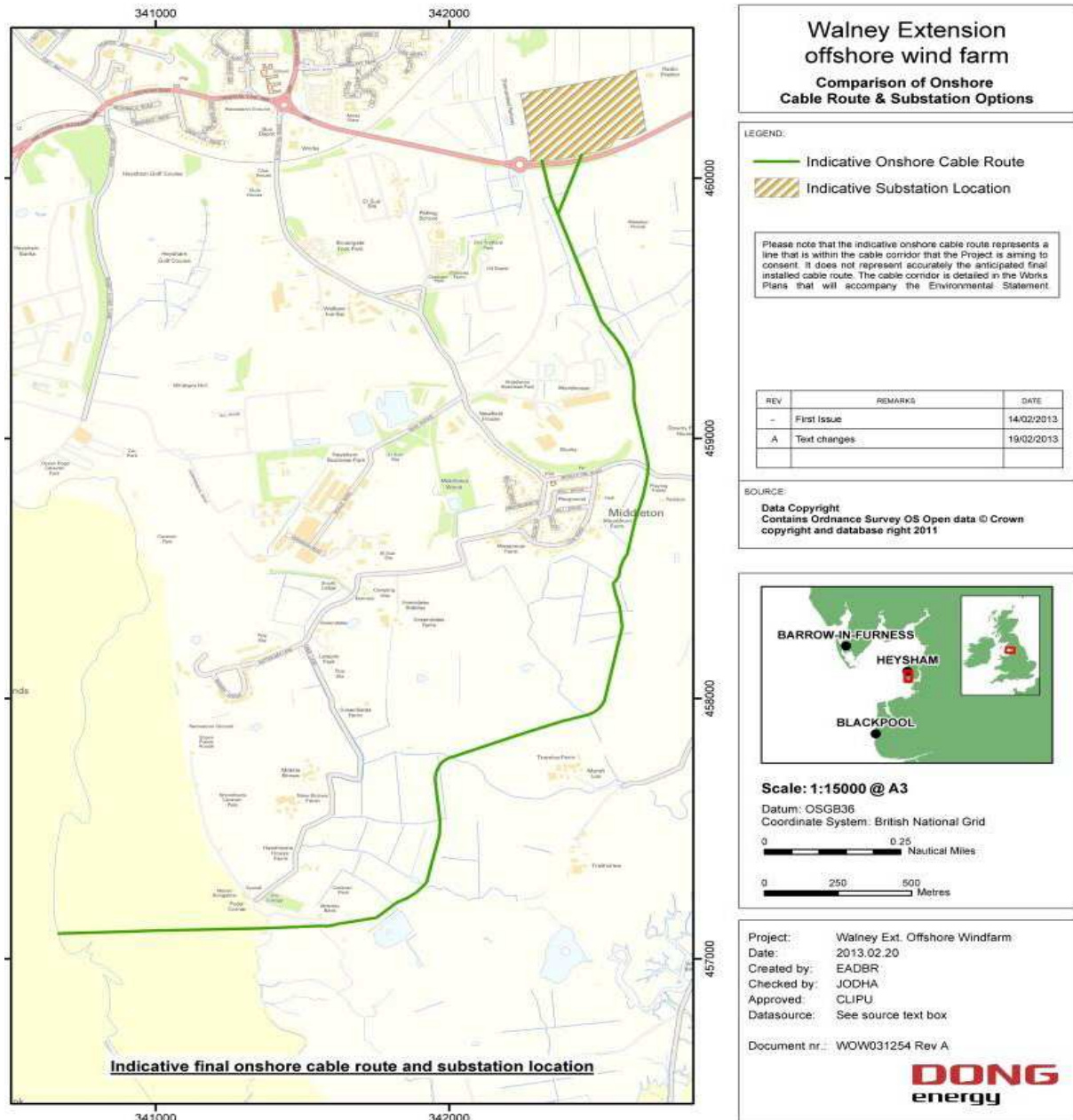
The proposed Walney Wind Farm Extension would be located immediately North West of the existing Walney 1 and 2 Wind Farms in the Irish Sea, approximately 19km west of Walney Island and 36km east of the Isle of Man. The proposed extension at its nearest point to the Lancashire Coast would be at a distance of about 35km. The Walney 1 and 2 wind farms and the West of Duddon Sands wind farm would largely screen the proposed extension. The site is nearly 150 square kilometres in area (see Map 1).

**Map 1: Location of offshore wind farm and export cables**



Undersea cables will bring the electricity ashore at Pott's Corner near Middleton in Lancaster district. Underground onshore cables will then connect to a new substation to be built alongside the A683, immediately south east of Heysham (see Map 2).

**Map 2: Location of onshore substation and underground cable route**



Detailed maps of the onshore elements of the project can be found via the following link and accessing:-

2.4.3 Onshore Works Plan.

<http://infrastructure.planningportal.gov.uk/projects/north-west/walney-extension-offshore-wind-farm/?ipcsection=app>

## **The proposed development**

The exact size, layout and methodology for delivery of the proposed wind farm is not yet determined and the developer needs to retain some flexibility to take into account technological advancements, infrastructure availability and costs up to the time of construction. For this reason the proposal is described in the form of a design envelope, which states the maximum adverse case scenario within which the project would be built. This is an established principle, also known as the 'Rochdale envelope' (after legal cases involving Rochdale Council) which is commonly used for proposals of this type, where there is a rapid development of the technology, changing market conditions and a long lead-in time to construction.

The project would involve the construction of between 93 and 207 wind turbines and occupy an area of up to 149 square kilometres (57 square miles) in the Irish Sea. The turbines would each have a generating capacity of between 3.6MW and 8.0MW. The physical dimensions of the turbines would be as follows:

- Hub height between 82 and 122 metres
- Rotor blade diameter ranging from 120 to 200 metres
- Maximum blade tip height ranging from 142 to 222 metres
- Clearance above sea level of at least 22 metres

Indicative layouts have been presented by the developer, but none of these represent the actual layout that will be built. They are intended to illustrate possible scenarios within the design envelope of the project. The separation distance between each turbine will be a minimum of 737 metres.

The foundations for the turbines will depend on a number of factors, including the type and size of turbine, maintenance requirements, water depth, tidal conditions, weather conditions, wind and wave loading, seabed stability, geology, decommissioning, transportation, costs and other technical constraints.

A network of inter-array cables will connect the wind turbines to an offshore substation within the wind farm area, at a voltage of 33kV or 66kV. The inter-array cables will be installed on the seabed by the most suitable method, including ploughing, trenching, jetting, cutting and rock-cover. The cables will be buried up to 3 metres below the seabed, with this increasing to up to 10 metres deep where mobile sand waves are present.

Up to three offshore substations may be required, but the most likely scenario is that two will be needed. Each substation is expected to comprise a deck ('topside') which would include switchgear, transformers, helicopter-deck, mast, crane and lighting. The maximum height of each substation would be 110 metres above low tide and the footprint would be a maximum of 70m x 70m.

Between two and five undersea export cables would be required to transmit the electricity from the offshore substations to the shore. These cables would carry



alternating current (AC) electricity between 132kV and 220kV. They would be buried up to 3 metres deep on the seabed, affecting a strip up to 10 metres wide (per cable). Where the desired burial depth cannot be achieved due to seabed conditions or at the crossing of other cables or pipelines the cables would be protected by rock armour. Where the cables come ashore, horizontal directional drilling will be used to tunnel beneath large structures such as sea walls, and the environmentally sensitive inter-tidal mud-flats and salt marsh.

The onshore cables would be installed in a single trench up to 3m wide, which would require a working corridor of up to 40m wide. The onshore cable route from the shoreline to the proposed new onshore substation is approximately 4.5km in length. During construction, temporary access roads would be needed to enable materials to be transported along the cable corridor. Following construction, the ground would be reinstated and returned to its former use, most of which is cultivated farmland.

A new onshore substation is proposed to be built south east of Heysham adjacent to the A683. The substation will connect electricity production from the wind farm to the National Grid and is likely to include transformers, switchgear, filters, reactive compensation devices and other technical equipment; together with operational requirements such as access roads, car parking, a turning area and a facilities building. Vehicular access to the new substation will be from an existing roundabout on the A683.

The location of the onshore port base for the construction phase is not yet known and does not form part of this DCO application. A number of Irish Sea ports are being considered including Heysham. A range of different vessels will be involved in the offshore construction phase, including:

- Foundation installation or jack-up vessels
- Cable laying vessels
- Crew and transfer vessels
- Service vessels
- Anchor vessels
- Tugs

Construction materials for the offshore work would be transported generally by sea, and it is anticipated that some 500 construction jobs would be created at its peak.

Similarly, the operational and maintenance base has not yet been chosen. It may be that these activities are undertaken from an existing base, such as Barrow, or that new facilities are proposed, which may be the subject of a separate future planning application. The applicant has supplied indicative information concerning the operational base, which would comprise:

- Buildings: offices 1,000 sq m, warehouse 1,000 sq m
- Parking: 100 spaces
- Harbour: pontoon, berthing and vessel fuelling
- Staff: up to 100 technicians and 20 office staff
- Traffic: 200 cars and 10 trucks per day
- Total site area: 6,000 sq m
- Service Vessels: 8 return journeys per day

- Helicopter service: approx 17 return journeys per day

The wind farm would be operational continuously throughout the year, generating electricity whenever the wind speeds are suitable, which is expected to be 85% of the time.

Subject to approval, construction is expected to commence in April 2016 and would take two years to complete. The wind farm would become operational in 2020 and would have an operational life of 25 years. At the end of the operational life the project would be decommissioned in accordance with an approved Decommissioning Plan. This would include the removal of the turbines and their foundations and the substation.

## **Key Issues in the Local Impact Report**

### **Policy considerations**

As far as the current proposal is concerned, there is no planning history of applications on any of the land affected by the cable route or the substation.

National policy indicates that there should be a presumption in favour of granting consent to applications for energy related Nationally Significant Infrastructure Projects. National Policy Statement (NPS) for energy (EN1) states that this presumption applies unless more specific and relevant policies set out in the NPS clearly indicate that consent should be refused.

NPS for Renewable Energy Infrastructure (EN3) reaffirms advice in EN1 on the basis that the need for infrastructure covered by the NPS has been demonstrated, and that there are ambitious renewable energy targets in place and a significant increase in large-scale renewable energy infrastructure is necessary to meet the Government's 15% renewable energy target.

NPS EN1 states that there is no requirement to consider alternatives or to establish that the proposed project represents the best option. There is only a requirement for alternatives that have been considered by the applicant to be reported. Consideration of alternatives focused mainly on the location of the onshore substation and the route of the export cable connecting to it. The way these alternatives have been considered is set out in the Environmental Statement (Chapter 5: Site Selection).

The onshore elements of the project fall within the Heysham Energy Coast identified in the Lancaster City Council Local Plan. Energy related projects are encouraged in this location.

The proposed development will support economic development aspirations being promoted by the Lancashire Economic Partnership within the Lancashire Growth Plan 2013/14. This identifies the need to unlock opportunities of national significance in emerging and established growth sectors including energy.



## **Evaluation of the applicant's Environmental Impact Assessment**

The Environmental Statement (ES) submitted in support of the application includes detailed topic based assessments of the environmental impacts of the projects. These cover onshore and offshore impacts upon the natural and built environment. The PPA authorities have reviewed the parts of the ES that are relevant to their jurisdiction and geographical areas. The LIR attached to this report has been prepared in two parts, dealing separately with impacts arising from the onshore works (mainly affecting Lancaster district) and offshore works (mainly affecting coastal communities in South and parts of West Cumbria).

In respect of the known impacts of the onshore elements of the project there are positive, neutral and negative impacts. The PPA authorities consider that the negative impacts of the onshore elements of the project are not significant overall. These relate to the following matters:

- Further consideration of avoidance, mitigation and compensation relating to the impacts on protected sites, and protected and priority species;
- Consideration of the viability of the prior extraction of minerals from the area of search corresponding with the location of the substation;
- Further assessment of the landscape and visual impacts of the substation proposals.
- The requirement for a “strip, map and record” process of archaeological mitigation during the construction of the substation;
- Safety on the local highways network, highways maintenance and the routing of abnormal loads from the M6;
- The need to maximise the use of, and support for, local businesses and employment.

Discussions are ongoing between the PPA authorities and the applicant on the above matters.

## **Community Benefits Fund**

The establishment of a Community Benefits Fund is a separate process to consideration of the application by DONG Energy for a DCO. Officers not involved in consideration of the application for a DCO are working with officers from Cumbria County Council to negotiate a Community Benefits Fund, should the application for a DCO be consented. The Fund would provide 'compensation' to local communities for the development of a Nationally Significant Infrastructure Project in their area. When negotiations are completed a separate report on the establishment of a Community Benefit Fund will be submitted to a future Decision Making Session.

## **Conclusion**

National policy indicates that there should be a presumption in favour of granting consent to applications for energy related Nationally Significant Infrastructure Projects unless more specific and relevant policies set out in the National Policy Statements clearly indicate that consent should be refused.

The Local Impact Report prepared by the PPA authorities identifies a number of outstanding issues relating to the onshore elements of the project but these are not considered to represent a significant negative impact overall. The PPA authorities view is that they can be mitigated against by requirements in the DCO and/or a s106 agreement.

The proposed development will support economic development aspirations being promoted by the Lancashire Economic Partnership within the Lancashire Growth Plan 2013/14 as a location to grow the energy sector. The onshore elements of the Project fall within the Heysham Energy Coast identified in the Lancaster City Council Local Plan.

### **Recommendation**

It is recommended to make representation to the National Infrastructure Directorate of the Planning Inspectorate stating that the County Council supports the proposal, taking account of the matters raised, and subject to the mitigation required, in the Local Impact Report.

### **Consultations**

N/A

### **Implications:**

This item has the following implications, as indicated:

### **Risk management**

No significant risks have been identified in relation to the proposals contained within this report.

### **Financial**

The PPA is a means by which the County Council (and other local planning authorities affected by the proposals) can participate and engage in a positive way with the developer and reach a fully informed view on the local impacts of the proposals.

The PPA has not funded the County Council to enable it to make its representations to the National Infrastructure Directorate on the merits or otherwise regarding the application for a Development Consent Order by DONG Energy.

### **Legal**

There are no legal issues arising from the recommendation in this report.

### List of Background Papers

Paper	Date	Contact/Directorate/Tel
Full details of the application can be found at:- <a href="http://infrastructure.planningportal.gov.uk/projects/north-west/walney-extension-offshore-wind-farm/">http://infrastructure.planningportal.gov.uk/projects/north-west/walney-extension-offshore-wind-farm/</a>	22 July 2013	Richard Camp/Environment Directorate/ 01772 532965 Phil Megson / Environment Directorate / 01772 534162

Reason for inclusion in Part II, if appropriate

N/A