10 Traffic, Transport & Access

10.1 Introduction

All of the components of the proposed High Clachaig Wind Farm will be transported to the site by road, which creates the potential for effects on the trunk and local road networks. Therefore, it is proposed to undertake an assessment of the potential impacts of the proposed development in respect to traffic and transportation matters.

10.2 Existing Environment

The proposed access route for turbine delivery to High Clachaig is from Campbeltown Harbour. The components will egress Campbeltown Harbour onto Kinloch Road, with a right turn onto Lochend Street. Access to the A83 from Lochend Street is via the new road which has recently been constructed as part of the Kinloch Road Regeneration Project. The delivery vehicles will continue along the A83 before turning off at either Muasdale or Killean and heading east towards the site.

Other plant and materials will be delivered to site using HGVs and may use either the same route from Campbeltown, or via the A83 or A816 from the north.

The route to the proposed development site for the abnormal loads will be confirmed during the EIA process as details on the size of turbines are finalised and through consultation with Transport Scotland and Argyll and Bute Council.

Baseline traffic flows data will be obtained for the selected delivery route from relevant sources including Transport Scotland and Argyll and Bute Council (where available) for the A83. Furthermore two-way traffic counts may also be taken at the A816 and A83 to the north of Lochgilphead. The collated data is expected to confirm traffic levels including light goods vehicles (LGV) and heavy goods vehicles (HGV) using the access routes. These figures will be combined with the forecast levels of construction traffic in order to identify the likely development effects along the delivery route.

Background traffic flows are predicted to increase on the local road network regardless of the proposed development. This assumption is based on the forecast growth in the volume of traffic as described in the Department of Environment DETR publication National Road Traffic Forecasts (Great Britain) (NRTF).

10.3 Methods

10.3.1 Proposed Surveys

The collated traffic flow data outlined above will be used to accurately assess the potential effect on traffic flows resulting from the proposed construction traffic associated with the High Clachaig Wind Farm. The traffic data will be used to establish the baseline conditions within the identified study network for the ES.

Future design year traffic flows will be forecast utilising National Road Traffic Forecast (NRTF) ‘low’ growth assumptions, unless otherwise agreed with Transport Scotland & Argyll and Bute.

10.3.2 Committed Development

Discussions would be held with Transport Scotland and Argyll and Bute Council to identify any ‘committed’ development traffic flows which would require to be considered within the study.

10.3.3 Assessment Methods and Guidance

Existing traffic data will be gathered and reviewed to assess the potential effects of traffic movements on the local road network. This will include provision of details to Transport Scotland and Argyll and Bute Council of the

proposed access route off the trunk road network, the point of access to the site and an indication of the likely number of vehicle movements.

In accordance with the *Guidelines for the Environmental Assessment of Road Traffic* (Institute for Environmental Assessment, 1993), the method used will be based on a comparison between predicted traffic flows on potentially affected roads with and without construction traffic, in percentage terms. Transport Scotland and Argyll and Bute Council will be contacted to determine if there are any existing traffic surveys available for the study area.

10.3.4 Defining Significance

Criteria are applied to the percentage increases to establish whether significant environmental effects are likely. These criteria take into account the sensitivity of the receptors or the resources likely to be affected and any changes in the composition of traffic, specifically if more HGVs are anticipated. The criteria are a 30% or more increase in total movements or of HGVs, or a 10% increase where sensitive locations are present such as schools.

The significance of each effect is considered against the criteria within the Institute of Environmental Assessment (IEA) guidelines, where possible. However, the IEA guidelines state that:

> *"for many effects there are no simple rules or formulae which define the thresholds of significance and there is, therefore, a need for interpretation and judgement on the part of the assessor, backed-up by data or quantified information wherever possible. Such judgements will include the assessment of the numbers of people experiencing a change in environmental impact as well as the assessment of the damage to various natural resources."*

The significance of the effects on receptors will therefore be evaluated against the IEA guidelines and, where possible, in line with the criteria used for the other environmental topic areas covered in the ES. These criteria are subjective but take into account the numbers of receptors affected, their sensitivity and the length of the period for which they will be affected. Mitigation, where appropriate, will be identified and incorporated into the wind farm design.

10.4 Potential Effects

It is likely that the main transport effects will be associated with the movements of commercial HGVs (defined as goods vehicles exceeding a gross vehicle weight of 7.5T) travelling to and from the site during the construction and decommissioning phases of the development bringing materials and equipment via the A83.

For each turbine, one vehicle is required to deliver the nacelle, one for the hub, three for the tower, three for the blades, one for the transformer, one for other components and an additional two vehicle movements are required for the delivery and removal of the cranes. In addition to the turbine delivery vehicles there will be an assortment of HGVs and LGVs transporting construction materials to the site.

10.5 Traffic, Transport and Access Aspects to be Scoped Out

Once the wind farm is operational, it is envisaged that the amount of traffic associated with the development will be minimal (restricted to occasional service vehicles such as 4x4s with occasional need for larger vehicles). Therefore, it is not proposed to undertake any detailed assessment of the operational phase of the wind farm as part of the EIA.

10.6 Conclusion

The assessment will provide details of the proposed access route from the trunk road network, the point of access to the site and an indication of the likely number of vehicle movements and traffic management plans required during the process.

The ES Chapter will assess the potential effects on local roads due to construction traffic. There are very few operational traffic movements so it is proposed to scope out the effects of operational traffic movements.

Table 10.1: Summary of the Scope of the Traffic, Transport and Access Impact Assessment	
Aspect	**Scope**
Construction Traffic	An initial access assessment has been undertaken comprising an analysis of a range of potential access routes along the proposed delivery route. The assessment will provide details of the proposed access route off the Trunk road network, the point of access to the site and an indication of the likely number of vehicle movements and any traffic management plans required during the process.
Decommissioning traffic	
Elements to be Scoped Out	
There are very few operational traffic movements so it is proposed to scope out the effects of operational traffic movements.	

10.7 References

Institute of Environmental Assessment (1993); The Institute of Environmental Assessment's, Guidelines for the Environmental Assessment of Road Traffic

Department of the environment Transport and Regions – DETR (1997); National Road Traffic Forecasts