IMPACT ANALYSIS OF SULLOM VOE TERMINAL AND RELATED JOB REDUCTIONS

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AND RELATED JOB REDUCTIONS

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1. **Introduction and Background**

1.1 This report has been produced for Highlands and Islands Enterprise (HIE) in response to a request from the First Minister for an assessment of the economic impacts of significant reductions in staffing at the Sullom Voe Terminal that were announced by a number of companies in the latter half of 2015. The main focus is on the employment of Shetland residents and the supply chain in Shetland, with some information also obtained on the wider impacts in Scotland.

1.2 Much of the information we obtained on redundancies associated with particular employees is confidential, with, in some cases, negotiations still being carried out with individual members of staff. Figures we are able to provide in this report are therefore aggregated and should be regarded as indicative.

**The Wider Context of the Worldwide Oil and Gas Industry**

1.3 Worldwide, the oil and gas sector is having to respond to the fall in oil prices by cutting costs and shelving or delaying investment projects.

1.4 Historical trade patterns have been shifting, with pressure for greater energy security (e.g. in the US and Europe), new sources coming onto the market resulting in a surplus overall, and new markets emerging in the developing world. Today’s dominant global oil suppliers could find their position weakened in the face of new producers gaining market share, while the balance of demand is likely to shift from North America and Europe to the Asia Pacific zone and the Middle East. New regional trading blocs are emerging in North America and Russia/China/India and challenging OPEC’s dominant position in the global market.

1.5 The industry had been pushing the boundaries through developing previously inaccessible reserves, e.g. in deeper water and in Arctic regions, enabled by technological advances and innovation, e.g. remote and subsea operations and robotics, and floating storage facilities. However these complex projects are proving expensive and tending to come in over budget. Companies are having to adopt new strategies to remain competitive, and many oil field service companies are being squeezed. Companies have also been cutting capital expenditure and putting projects on hold in order to bring their costs back under control. West of Shetland and the Sullom Voe Terminal (SVT) are not immune from these global pressures and market trends.

1.6 The big question is how long the present low prices will be maintained and when more political stability and economic growth could lead to increasing demand and thus an increase in prices. Many dynamic variables make this difficult to predict, with many now suggesting it could be 5-10 years before there is any significant recovery in oil prices.

**The Shetland Context**

1.7 For more than 30 years, SVT has been receiving oil and gas from the fields to the north and east of Shetland, and more recently from the Clair oil pipeline and shuttle tankers from Schiehallion and Loyal fields west of Shetland. Peak throughput was achieved in the late 1980s and volumes have declined significantly since then.
1.8 The reserves in the West Shetland basin have, however, given a new lease of life to the terminal which is going through a refurbishment programme to make its operation more efficient and extend its life.

1.9 In recent years, Shetland has experienced high levels of construction activity and large numbers of travelling workers have been required to undertake various oil and gas related projects, with the main focus on developing the extensive reserves of oil and gas in the West Shetland basin. This has included capital projects at SVT and ongoing maintenance work, as well as work offshore that impacts on Shetland through the movement of equipment and people. All of this activity has provided remunerate opportunities for Shetland’s supply chain businesses.

1.10 The main activities in Shetland can be summarised as follows:

1. **Total UK at SVT**
   a. Completion of pipeworks for the Laggan Tormore fields.
   b. Construction of a new gas plant (almost complete).
   c. Completion of a new 100 bed hotel for gas plant operational staff.

2. **BP at SVT**
   a. Ongoing terminal operation, and seasonal maintenance programme.
   b. Rationalisation, and refurbishment programme, in order to extend the life of the terminal through to 2040-50, and make it more efficient in handling the expected quantities of oil and gas.
   c. Capital works programme, including a Gas Sweetening Plant, a new 120 bed hotel for operational staff employed on a rotational basis, and new HQ plus other ancillary buildings. The first of these has been delayed and the latter two are now on hold.

3. **Offshore**
   a. Schiehallion refurbishment and replacement programme, known as QUAD 204. This programme has been running since 2013 and should be complete in 2016. It had been expected that Shiehallion oil would continue to be transferred to SVT by shuttle tankers, after the refurbishment work offshore, through to 2035. However, due to a number of technical and cost factors it has been decided to load offshore and take oil directly to Rotterdam. This is expected to reduce the throughput at the terminal by nearly 40% and tanker movements by 20%. These changes will have a significant effect on unit costs at SVT and could reduce the need for maintenance and refurbishment contractors.
   b. Scatsta Airport: Operated by Serco and used by BP for movement of SVT staff and for transfers between fixed wing from Aberdeen and helicopters to offshore sites. Shell announced earlier in 2015 that it would be pulling out of Scatsta. The airport will continue to provide support operations to other offshore installations.
c. Sumburgh Airport: Operated by Highlands and Islands Airports Ltd and used by contractors for staff movements to and from SVT projects, and for transfers between fixed wing from Aberdeen and helicopters to offshore sites.

d. Lerwick Port Authority: Lerwick harbour is used for movement of goods and equipment to SVT and offshore, and has been a base for accommodation ships and barges (together with Scalloway).

e. Other Services: There are a number of other specialist companies with bases in Lerwick that provide support services to offshore activities and SVT, including accommodation providers, shipping agents, and subsea and offshore technology specialists.

2. Analysis of Existing Information and Data Obtained by Survey

2.1 We obtained information from news releases on redundancies declared by major SVT-related employers, the Skills Development Scotland PACE team, businesses account managed by Scottish Enterprise (SE), HIE, Shetland businesses whom we interviewed, and BP and Total on their future plans as conveyed to the Scottish Government, SE, HIE and Shetland Islands Council (SIC).

2.2 The largest numbers related to job reductions (declared or anticipated) by Petrofac (main contractor on the Total gas plant construction), the Wood Group (engineering and maintenance), Bilfinger (SVT maintenance and Total gas plant) and Randridge (engineering and maintenance). Where possible, we distinguished between job reductions due to the completion of the Total gas plant, seasonal factors, changes in operational practice, and delays in new projects or major maintenance that had been planned and would have given job certainty to some.

2.3 In the Worker Accommodation Demand study that we produced for HIE in August 2015, the numbers or workers at SVT in 2014 and expected in 2015 were tabulated, and our updated analysis produced amended figures for 2015 as given in the table at 2.14 below.

2.4 The actual capital works employment total in 2015 will have been lower than had been expected earlier in 2015 because the new BP hotel has been put on hold and other projects postponed. The most likely total employment associated with capital works in 2015 is now around 2,000 at peak. The gas sweetening plant postponement by BP is the most significant future influence on employment numbers, with the likely reductions in maintenance and refurbishment work also significant.

2.5 Since the middle of 2015 (as expected), there has been a rundown of workers on the construction of Total’s gas plant at SVT, with the project almost completed by the end of 2015. This has had a knock on effect on the accommodation barges used to house travelling workers, with four having been withdrawn, as well as on many Shetland suppliers across a range of sectors.
BP has decided to reduce its maintenance and refurbishment work over the winter months this year, which is also affecting the Lerwick barges. The ship and barge in Scalloway have now left as well, although the barge could return in 2016.

From a range of sources, estimates of the numbers of people made redundant or finishing contracts in 2015 are as follows. Information on the origin of many of the workers was provided to us by Skills Development Scotland (SDS), but detail is confidential.

<table>
<thead>
<tr>
<th>Total Laid Off</th>
<th>Total</th>
<th>Local</th>
<th>Traveller</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2,329</td>
<td>64</td>
<td>2,265</td>
</tr>
</tbody>
</table>

Of the non-Shetland people laid off, it is likely that around 270 are normally resident in the rest of Scotland. Over 300 are from Ireland, and the majority of the Petrofac and Bilfinger workers are thought to be from England.

From postcode analysis, a few locations stand out, including Glasgow, Paisley, Kirkcaldy, and Falkirk in Scotland; and Newcastle, Middlesbrough, and Doncaster in England – although the numbers are small in relation to the economies of these areas.

Virtually all of these lay-offs are due to contracts ending or seasonal work finishing. It remains to be seen how many of the seasonal workers are re-engaged next year, with the main factors being (i) the reductions in maintenance and refurbishment work due to the decision to divert Schiehallion oil from SVT, and (ii) the need for BP and other employers to consider further cost savings.

The contractors laying off staff have indicated that the majority will be redeployed elsewhere and that the actual number of people who will be surplus to their requirements is likely to be quite small. The majority of construction workers on the Total gas plant whose contracts have come to an end could be out of work for a period until offered a contract on a new project.

In addition to the Sullom Voe lay-offs given above, workers have been laid off by Serco and Bristows at Scatsta airport – possibly up to 65 in total. These reductions will mainly be due to changes offshore and the loss of the Shell contract rather than being SVT related, however.

From information provided by SDS, the overall total laid off in 2014 was around half of the number in 2015, and included very few Shetland residents – although sources additional to SDS were used in compiling the 2015 figures above. The equivalent numbers laid off in 2013 were lower again at 665 and represented a quarter of the 2015 estimate, which is a reflection of the changing patterns of work and the completion of the major gas plant project. This is more or less as would have been expected.
2.14 As a result, the numbers likely to be employed in the near future at SVT have been revised to those given below from the study on Workers Accommodation that was undertaken earlier in 2015 to take account of capital projects moving forward, lower maintenance staffing, and also operational staffing at SVT:

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Works, including Maintenance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BP SVT</td>
<td>660</td>
<td>600-1,000</td>
<td>600-800</td>
<td>670-1,070</td>
<td>920-1,320</td>
</tr>
<tr>
<td>Total UK SVT</td>
<td>2,500</td>
<td>600-1,500</td>
<td>200</td>
<td>80-120</td>
<td></td>
</tr>
<tr>
<td><strong>Overall Total</strong></td>
<td>3,160</td>
<td>1,200-2,500</td>
<td>800-1,000</td>
<td>750-1,190</td>
<td>920-1,320</td>
</tr>
<tr>
<td><strong>Operational Needs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BP SVT</td>
<td>220</td>
<td>220</td>
<td>230</td>
<td>230</td>
<td>230</td>
</tr>
<tr>
<td>Total UK SVT</td>
<td>134</td>
<td>147</td>
<td>127</td>
<td>127</td>
<td>127</td>
</tr>
<tr>
<td><strong>Overall Total</strong></td>
<td>354</td>
<td>367</td>
<td>357</td>
<td>357</td>
<td>357</td>
</tr>
</tbody>
</table>

3. Recent and Future Employment Impacts

3.1 In Shetland, there are four effects from SVT workers being laid off:

- Loss of employment and income for local residents previously employed
- Loss of contracts with Shetland businesses to supply goods and services, leading to a loss of turnover and income from employment
- Loss of employment and income through reduced personal spending while in Shetland by those temporarily resident for work purposes
- Induced impacts from reduced local direct and indirect impacts

3.2 The number of locally based residents losing their SVT-related jobs has been relatively small. On the figures given in Section 2, they only make up 3% of the total jobs lost in 2015. Nonetheless, there could be a loss of earned income by those who had been directly employed in the order of £2m over a year. The reduction in local spending from this will depend on other work in Shetland picked up by these people (where other local residents are not displaced), their benefits if they register unemployed, and whether they draw on savings to help maintain their expenditure levels.

3.3 The most significant indirect and induced impacts in Shetland will be through the loss of, or reduction in, contracts between the main SVT-related businesses (including the accommodation ships and barges) and Shetland suppliers. These negative impacts will affect Lerwick Port Authority and specific sectors that include accommodation, catering, transport (buses, planes, vehicle hire, and ferries), and engineering and construction services.

3.4 The responses to our consultations with local Shetland based companies are summarised in the following paragraphs.
Accommodation and Property

3.5 The dependency on SVT-related trade among the hotels varies, but could generally be around the 20% level, though with some as high as 80-90% dependency. The hotels have benefitted from higher room occupancy and increased bar/catering trade in recent years.

3.6 There is evidence of companies spending less, and of demand falling, and it is considered that there is a need for hotels and other accommodation providers to reinvest and return to tourism and other regular business markets.

3.7 There is an expectation that more housing could come on the market as SVT-related demand falls, with a 3% reduction in rentals expected over the coming year.

Wholesale and Catering

3.8 Contracts with the barges and ships that have been accommodating those working at SVT has accounted for around 25% of the turnover of the main wholesalers and caterers in 2015. The wholesalers expect their sales to fall dramatically over the next year. They also supply the ships calling at Lerwick and Scalloway, whose demand is also falling. Reduced catering demand will also have adverse effects on Shetland’s food and drink producers.

3.9 All workers are locally based and numbers will be reduced through retirements and natural wastage. The businesses also expect to see the volume of sales to pubs and shops go down due to less spend by oil workers. As a result they are investigating diversification options as a way forward as well as becoming more cost competitive.

Transport

3.10 Bus operators and vehicle hire businesses have been very busy over the last few years. Some had obtained around 50% of their income from oil and gas work at the peak in the summer of 2015. They have achieved this increase through re-employing retired workers, high levels of overtime, and some workers being brought in from outside Shetland. They are now facing a contraction of business, with their dependence more than halved, and are seeking to diversify, e.g. into tourism.

3.11 Lerwick Port Authority had expected a slowdown in investment offshore in both east and west Shetland during 2015, and this happened, with reduced business through the port.

Engineering and Construction

3.12 Some companies have become very dependent on the Shetland oil and gas sector, e.g. for up to 90% of their turnover. They expect this dependency to fall by a half over the coming year. They have had to recruit staff from outside Shetland – some up to 50% of their staff, and they expect these travelling workers to go, leaving them with the local workforce. They expect that it will be more difficult and competitive to get contracts from now on.

Technical and Other Services

3.13 A number of locally based companies are experiencing reduced demand and expect their turnover to fall by a half over the next year.
General

3.14 It is very difficult to disentangle the effects that would have been expected, in particular due to the completion of the gas plant, from the effects of other cutbacks and changes at SVT, since there has been overlap in the use of certain facilities and services. Many of the businesses providing services to the oil and gas sector are unable to break down their reductions in income.

3.15 There have also been reductions in local spend by the travelling workers who have been living in Shetland. We found evidence of substantial personal spend in pubs, restaurants and local shops on a wide range of goods, but it has not been possible to quantify this.

3.16 Other important local impacts from the lower oil price and fewer tankers using the terminal include reduced income to SIC as port authority and landlord. This is expected to result in a loss of £1.3m in the year to the end of March 2016 on the harbour account, and will mean a reduction in the rental contribution to the Shetland Charitable Trust (SCT) who are facing a loss of income of £250,000 per annum. This is money that would have been used to support a range of community and social care projects as well as adding to the capital value of the Trust.

3.17 This is on top of lost income to the Council in the order of £1.43m this year due to delays in the completion of the new gas plant, and a similar level again from the shutdown of the Clair field. Scalloway harbour income rose significantly (+400%) between 2013/14 and 2014/15 due to the presence of an accommodation ship and barge, but with their departure this will fall back.

3.18 Following negotiations with the oil industry, the Council is proposing to increase its Sullom Voe harbour charges by 83% in 2016 to compensate for the reduction in tanker movements due to the Schiehallion decision. This increase will have a negative effect on operators’ unit oil costs at a time when international prices are low.

Net Employment and Earnings Impacts in Shetland

3.19 As illustrated in our Worker Accommodation Study report, there will continue to be growing demand for employees in Shetland for other construction-related work and positions in other sectors that the locally domiciled workforce should be able to fill despite the negative SVT-related trends summarised in this report.

3.20 ONS data show that Shetland provides more jobs than the number of residents available to fill them (1.03), even though not all temporary jobs (e.g. in construction) will be included in the total jobs figure. This illustrates that people in Shetland who might lose an oil or gas related job will have other alternatives within Shetland, but not necessarily at a comparable rate of pay.

3.21 The only local authority areas in the UK, apart from London, with higher job densities than Shetland in 2013 were Belfast (1.23), Aberdeen City (1.22), Manchester (1.05) and Nottingham (1.04). In these places, daily commuting will be the principal factor in the high job densities.
3.22 The relatively high average earnings in Shetland from Annual Survey of Hours and Earnings (ASHE) data show that average earnings for full time workers and for part time females in Shetland compare favourably with all other parts of the Highlands and Islands (where public sector employment tends to be a positive factor) and with Scotland as a whole. In 2015, the average annual earnings for all full time workers in Shetland was £32,623, 6% higher than in Highland, which was the next highest of the Highlands and Islands local authorities.

3.23 Residents taking up different jobs will tend to reduce these differentials, although a more competitive labour market will reduce employment costs in certain sectors to the benefit of Shetland employers who have had difficulty in recent years in recruiting staff or remaining competitive in their markets.

Wider Employment Impacts

3.24 Elsewhere in Scotland, there will be employment impacts from the loss of contracts in Shetland and reductions in employment (both relating to staffing within Shetland and at businesses’ mainland premises), although it would appear that many of the businesses involved will switch people to work on other contracts in other locations, which is their normal work pattern. Thus there might not be a significant negative effect in any particular location. There is also evidence of a spread of workers resident throughout the Highlands and Islands who have lost their jobs – but not of a major order of magnitude in any particular place.

3.25 In comparison with other employment reductions across Scotland related to the fall in the international oil price, the net job reductions related to redundancies in Shetland in the past six months are very small (excluding reductions relating to the end of the Gas Plant construction project). For example, in an Energy Voice interview earlier this month, Sir Ian Wood gave an estimate of 8,000-10,000 job losses in the north east for 2015, and predicted a further 10,000 in 2016. The OGUK’s 2015 Economic Report, published in September, gave a figure of about 65,000 oil & gas related jobs lost in the UK since the start of 2014, including supply chain employment.

4. Conclusions and Recommendations

4.1 The ramifications from the fall in the price of oil will continue as new projects are delayed or put on hold, and exploration is cut back, especially in marginal areas. All companies are striving to cut costs and make efficiency savings in order to ensure their future competitiveness and profitability.

4.2 SVT-related effects so far appear to be relatively small, and to relate mainly to lay-offs that had been expected and completion of capital projects. The overall job reductions should become clearer in 2016 as fewer contractors come back on maintenance and refurbishment work, existing commitments come to an end and new projects are postponed. Therefore, the effects and impacts identified in this report could substantially increase, with more to come beyond 2016 if the oil price does not recover in the near future.
4.3 The most significant and longer term impacts are likely to arise from oil and gas being diverted from SVT, including the Schiehallion decision, which will result in less income to the port and to the Council/SCT from SVT rental, as well as reduced ongoing maintenance requirements.

4.4 However, the main oil companies say they are committed to SVT and see a significant role for it over the next 20-30 years, given the reserves West of Shetland and the continued extensions to the life of the East Shetland fields. Total UK are committed to further work offshore, e.g. on Tormore and Glenlivet. So also is BP with the Clair field in order to justify the investment at SVT. Nonetheless, this is still dependent on ongoing investment and efficiency savings to maintain the competitiveness of the terminal; and the increased charges by SIC to compensate for the loss of Schiehallion related income could deter activity.

4.5 It is possible that some of the other oil companies with interests in other fields will put their plans on hold, although it has been suggested that a sustained fall in the price of oil could result in decommissioning being brought forward – which would provide work for Shetland.

4.6 It would appear from the evidence that the immediate effects of the lay-offs at SVT are having little impact in Shetland due to the relatively small number of local workers who have lost their jobs. The local job market is still buoyant due to demand in other sectors, in conjunction with the construction demand unrelated to the oil & gas sector over the next 5-10 years identified in our Shetland Worker Accommodation Demand Study, even if some of this is affected by the local economic circumstances.

4.7 The impact on the rest of Scotland is not clear as information on the residence of the workers whose work in Shetland has terminated is not fully available. However, anecdotal evidence suggests there could be an effect in the Glasgow area, especially from Petrofac workers (although small in the context of the scale of the area’s labour market). The other main concentrations are in the north east of England and Ireland. There are some from other parts of the Highlands and Islands, although the overall numbers are relatively small.

4.8 The bulk of the layoffs have been due to the completion of capital works, which mean that worker contracts come to an end rather than there being redundancies.

4.9 The employment effect locally from these direct job reductions that related to Shetland residents has been minimised through retirals, natural wastage and reducing overtime. The latter will mean that average earnings in Shetland, which have been inflated, will return to a lower but more normal level.

4.10 There is evidence, however, that there will be important impacts on local suppliers and wholesalers as well as on transport operators and accommodation providers. In particular, the local dairy and milk producers face a difficult adjustment. Some of the transport operators will be shedding staff but this will be achieved by these people leaving Shetland or retiring.

4.11 The accommodation sector and housing market are being impacted, though the extent of this will depend on the numbers returning next year after the normal winter reduction, and
the budgets that contractors have for accommodation. It is expected they will no longer be willing to pay high prices or to block book rooms, so the sector will have to adjust to more competitive pricing and, in some cases, seek to attract tourist visitors again.

4.12 One of the main broad findings of this study is that, while there are some immediate effects, the main local indirect and knock on effects of the downturn in oil activity are longer term. It will be a more gradual process over the course of 2016 and beyond.

4.13 The policy issues and possible responses arising from these changes in activity will depend on the extent to which employment reductions relate to construction or operational activity.

4.14 Construction activity always brings peaks and troughs due to its intermittent nature. Ways in which negative impacts can be mitigated by policy include to:

(a) Encourage the use of local suppliers, contractors and employment and close coordination between all the agencies and the industry
(b) Support advance training and upskilling for local workers
(c) Encourage construction activity to be coordinated and spread over time to reduce the peaks, and prolong the local benefits
(d) Encourage the provision of more accommodation facilities onshore that can be reused through time

4.15 Operational activity can bring more and longer lasting benefits, especially if workers are domiciled in Shetland and leakage from Shetland is minimised. This implies action to increase the indirect effects, i.e. the supply of materials and services by Shetland firms, and the induced effects – the spend by households within Shetland.

4.16 Policy actions could include to:

(a) Increase the ability of local construction and engineering industry to provide more services to the oil and gas sector
(b) Encourage the domiciling of staff rather than fly in fly out staff
(c) Attract more businesses to use SVT
(d) Retrain the resident labour force to take up work in growing sectors of the economy, which could include house building with less SVT-related work available to the Shetland construction sector

4.17 Nevertheless, since the main factors that are driving the cost cutting in the sector are due to the low price of oil through global market conditions, there is not much scope for the agencies or Government to influence the implications in Shetland or elsewhere, especially since the price is so low, and could remain significantly lower than in the recent past, over the next 5-10 years.