

I²EV (My Electric Avenue)

2nd Project Six Monthly Progress Report

Project Number	SSET205
DNO	Southern Electric Power Distribution Ltd
Project Lead	EA Technology
Reporting Period	July 2013 – December 2013

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Date: December 2013

Version: Issue 1.2

The 'My Electric Avenue' project is the public identity for the Low Carbon Network (LCN) Fund Tier 2 project "I²EV". The formal title "I²EV" is used for contractual and Ofgem reporting purpose.

Project leads



Project partners



My Electric Avenue has received support from Ofgem through the Low Carbon Networks (LCN) Fund.

Version History

Date	Version	Author/s	Notes	Reference documents
05/12/2013	0.1-0.2	TB		Customer Engagement Plan Project Risk Register Project Direction
18/12/2013	03-06	TB	Incorporating comments from SSEPD and internal reviews.	
18/12/2013	1.0	TB	Issued following internal comments.	
20/12/2013	1.1	TB	Incorporating SSEPD comments.	
23/12/2013	1.2	TB	Incorporating SSEPD & internal comments.	

Final Approval

Date	Version	EA Technology authorisation by:	SEPD authorisation by:
18/12/2013	1.0	D. Hollingworth	
20/12/2013	1.1	D. Hollingworth	
23/12/2013	1.2	D. A. Roberts	

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Registered in England number 2566313

Executive summary

This project was submitted to Ofgem's Tier 2 Low Carbon Networks (LCN) Fund as 'I²EV' but was rebranded early in 2013 to improve public acceptance as 'My Electric Avenue.' The project is led by EA Technology, with project partners Scottish and Southern Energy Power Distribution Limited (SSEPD) (the host Distribution Network Operator), Nissan (EV supplier), Fleetdrive Electric (electric vehicle rental programme management), and Zero Carbon Futures (charging point network developer), and Northern Powergrid (collaborating DNO). In addition there are two academic institutions supporting the project, the University of Manchester (providing network modelling and analysis), and De Montfort University (providing socio-economic data gathering and analysis). Ricardo is independently verifying the project.

The forecasted growth in electric vehicle (EV) sales is expected to cause an increase in peak-time demand for electricity both locally and nationally. At the local level there is a risk that low voltage (LV) cables will become overloaded where multiple EVs are clustered and connected for charging at the same time and during peak hours in electricity demand, e.g. in the early evening peak when people return from work.

The project is delivering two strands of innovation. Firstly, a new commercial arrangement has been developed whereby a non-DNO manages an LCN Fund project on behalf of a DNO (traditionally it is a DNO that won funding under the LCN Fund and carried out the project). Secondly, a programme of trials using real customers and real EVs is underway. This will both assess the impact of EVs on local electricity networks and test the feasibility of a DNO-led technical solution, 'Esprit', to manage EV demand to smooth out the demand peaks on the local distribution network. The results of these trials will be of interest and will be communicated to the GB DNO community, UK Government, the energy industry and the public.

The trials will assess the impact on an LV feeder of a cluster of EVs in daily operation in a given neighbourhood or business campus. The project will trial a technical solution, which could avoid the need for significant investment in the local network to cope with this increased demand. Therefore, the project is delivering two separate trial programmes, one technical and one social.

- The technical ('cluster') trials will aim to simulate a 2030 network; these clusters are in both residential situations (charging at home) and in business situations (charging at work).
- The non-cluster 'social trial' EV users will be monitored under a data collection exercise of customer driving and charging habits and demographics, and will be individuals and fleet hire users.

The below paragraphs detail progress made against deliverables (e.g. commercial arrangements) and notable milestones (e.g. delivery of vehicles).

Commercial arrangements were completed within the current reporting period. This concluded the negotiations between EA Technology, (the project delivery lead) and project Partners / sub-contractors with signing of sub-contracts and associated task orders.

Recruitment of trial participants is proceeding significantly ahead of schedule, with the milestone recruitment of 7 clusters of 10 participants originally planned for March 2014 being achieved by 13 November 2013.

Equipment (charging points and Esprit Intelligent Control Boxes) being utilised for the trials has been tested and is, in some clusters, undergoing installation in preparation for delivery of EVs.

Delivery of EVs has started, with 10 being authorised for order and delivery (at the financial risk of EA Technology) in order to ensure those customers with the most urgent requirement for a vehicle receive one as soon as possible to prevent those customers withdrawing from the project. These will be delivered around Christmas 2013.

Risks

Recruitment Risks

There were initially a number of risks relating to the recruitment of customers for participation in the trial based on the experiences of previous Tier 2 LCN Fund projects. Other LCN Fund projects have encountered difficulties in recruiting sufficient customers to participate in trials creating difficulties in providing statistically significant data to drive learning for the project. Therefore, the anticipated level of customer participation was low relative to the effort expended on customer recruitment.

Experience to date on the project however has proved otherwise with nearly 2,000 registrations of interest and seven clusters of 10 participants forming four months ahead of the SDRC deadline. Whilst this has reduced the risks anticipated at the start of the project, other significant risks are forming.

A significant emerging risk to the project is focused on the implementation of clusters following recruitment; natural fluctuation of trial participants has caused minor changes in some already established clusters (three clusters have had one participant leave and one has had a participant join). The wording of clauses in the Project Direction leaves a possibility that unless any participants leaving a cluster are replaced the expenditure linked to cluster establishment can be clawed back.

The currently established clusters, despite the attrition experienced to date are still considered to contain sufficient trial participants to generate the learning intended at project bid submission. Information to this effect, including support from the Ricardo, the project's Independent Evaluator has been submitted to Ofgem on 13th December 2013.

Procurement Risks

Procurement of the technology is proceeding as expected, with the lead times for items being managed with the expectations and availability of trial participants for available installation dates.

Installation Risks

Installation of trial equipment in the initial clusters is finding that in some instances, communication between the Intelligent Control Boxes (ICBs) located in participant properties, and the monitor controller (MC) in the sub-station is not functioning as expected. As part of the cluster checks, a PLC survey was undertaken to ensure suitability, so far as was reasonably practicable, for the properties participating in the project; during this test, a stable connection was made with the properties now experiencing difficulties. Further testing and adaptation of the technology and settings is underway to identify the cause and mitigate against it for future clusters.

Learning Outcomes

Learning is captured in a learning log that is kept updated on an ongoing basis. The work undertaken in the current period has predominantly provided learning related to the overall commercial arrangement.

- Naming partners/suppliers in the Project Direction places the project delivery lead organisation in a weak negotiating position;
- Establishment of the overall commercial arrangement requires consideration of the size and type of all involved organisations and the scope of their anticipated work;

- Identifying key clauses likely to cause difficulties with all parties prior to signing of the principal contract is strongly recommended;
- Generating multiple variations of the principal contract with all partners / suppliers required significant resource / time allocation ; holding initial contract reviews then conference calls with all relevant personnel accelerated development of sub -contracts. This will require expanding to assist the avoidance of unsuitable clauses in the principal contract wherever possible;
- The terms under which the LCN Fund Tier 2 contracts are issued (ref. LCNF Governance document and project specific Project Directions) are highly focused on ensuring best value and minimising risk for the end customer. Since LCNF innovation projects by definition involve risk and uncertain value, this focus results in the risks and sometimes costs associated with innovation being passed back to the project delivery lead. The level of risk can be unsustainable for the project delivery lead, particularly where the lead is a 3rd party SME rather than the funding DNO. It is recommended that consideration is given to how best ensure the LCNF Tier 2 projects retain the requirement for providing best value for money to the end customer whilst also ensuring that businesses including SMEs retain the incentive to participate in such projects.

External Dissemination

My Electric Avenue dissemination to date has utilised various communication channels to boost awareness and publicity around the project, ultimately to engage customers and other interested parties. External dissemination follows a planned schedule of newsletters and press releases, appropriately timed to produce maximum impact following key events in the course of the project.

My Electric Avenue has also been presented and represented at several industry events. A record of these is provided below.

- Industry & Parliament Trust Reception – July 2013 - My Electric Avenue case study feature in report – Dave A Roberts, Gill Nowell
- Cenex LCV2013 - September 2013 - (Panel discussion) – Dave A Roberts
- HEVC – November 2013 - Paper Presentation – Mary Gillie
- LCNF Conference - November– My Electric Avenue stall/presentation and panel discussion – Dave A Roberts, Dan Hollingworth, Tim Butler, Gill Nowell, Richard Potter, Mary Gillie

During the LCNF event Tom Greatrex MP, SSEPD's Mark Mathieson, ENA's David Smith, Northern Powergrid's Jim Cardwell all had test drives in a Nissan LEAF. According to the ENA, @MyElectricAve accounted for over 40% of all #LCNF2013 tweets.

Internal Dissemination

In the latest reporting period, EA Technology has disseminated progress and key learning internally through:

- Presentations for staff within the Future Networks and Business Development divisions of the business;
- Progress update meetings with EA Technology project steering group members and company board members;
- Company internal social network.

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1 Project manager's report

Within the current reporting period, (July – December 2013), the I²EV project was planned to focus on the areas below:

- Completing the establishment of the novel commercial arrangement between all parties involved within the project.
- Undertake an Independent Review / Evaluation of the project in the first 6 months.
- Continuing to recruit participants to meet the requirements for the technical trials.
- Begin recruiting participants for the social trials.
- Agree equipment installation methods for all distribution network licence areas.
- Begin establishment of technical trial clusters and social trials.

The specific tasks completed to date in line, or ahead of the project plan are:

- Completion of the commercial elements of the project with all project partners and sub-contractors under contract. The evaluation of the effectiveness of the commercial structure being implemented is scheduled for the last stages of the project in 2015.
- Further EV test drive events have been undertaken as part of the customer recruitment activities.
- Established 7 clusters, with at least 10 participants who have signed binding contracts, with evidence submitted to Ofgem on establishment of each cluster. This SDRC requirement was met four months ahead of schedule on 13 November 2013. This accelerated progress in customer recruitment has ironically posed a delivery challenge, as it is becoming necessary to draw down on funding originally planned for 2014/15 to establish all clusters and avoid customer drop-out. The use of future years funding is restricted in the project direction, and can only be spent at risk. The risk is passed to EA Technology as project manager.
- The project is expected to achieve 100 customers across at least ten clusters by the end of February 2014.
- The first EVs are already on order for the social trial participants.
- Ricardo undertook the independent project review, with both the review, and formal response provided to Ofgem in line with the project SDRC requirements.
- Agreed working methods for installation of equipment in DNO licence areas.
- Installation of charging points and associated Esprit equipment has begun in some clusters.
- Development of the surveys required for both social and technical trials has been undertaken; these are now ready for issue to trial participants in advance of their receipt of electric vehicles (EVs).
- Disseminated key project learning to the electricity industry at the Low Carbon Networks (LCN) Fund Conference in November 2013.

In addition to the planned activities above, work has continued a formal Change Request to the Project Direction to better reflect budgeted expenditure as required to fulfil the project direction see section 2.1.

Tasks planned for the forthcoming reporting period are:

- 2nd Independent Project Review by Ricardo.
- Sign-up at least 100 participants within the technical trials.
- Sign-up at least 10 cluster groups.
- Provide EVs to the established clusters.

- Install Esprit equipment at all clusters.
- Monitor initial clusters under control and identify changes to system thresholds for testing purposes.

1.1 Current status of cluster recruitment

The below tables detail the status of customer recruitment / cluster establishment on the project and the change (if any) on those submitted clusters. Table 1-1 shows clusters for which evidence of establishment has been submitted to Ofgem. Evidence consists of signed contracts, declarations of interest and satisfactory results from credit checks and network /property checks. Table 3-4 shows any changes in these clusters since establishment.

Table 1-1: Technical trial clusters submitted to Ofgem

Report no.	Cluster Name	Cluster evidence report submission date	DNO Licence Area	Home / Work based	No. in cluster	Date of first credit check	Date of credit check expiry
1	Chiswick	27/09/2013	SSEPD – SEPD	Home	10	17/09/2013	16/12/2013
2	South Gosforth	27/09/2013	Northern Powergrid - NEDL	Home	10	17/09/2013	16/12/2013
3	Wylam	27/09/2013	Northern Powergrid - NEDL	Home	10	16/09/2013	15/12/2013
4	Marlow	30/09/2013	SSEPD – SEPD	Home	10	27/09/2013	26/12/2013
5	South Shields	14/10/2013	Northern Powergrid - NEDL	Home	10	08/10/2013	07/01/2014
6	Chineham	11/11/2013	SSEPD – SEPD	Home	10	05/11/2013	03/02/2014
7	Whiteley	13/11/2013	SSEPD – SEPD	Home	10	11/11/2013	10/02/2014

Table 1-4: Technical trial clusters submitted to Ofgem: changes since submission

No.	Cluster Name	No. in clusters – submitted (current)	Movement (attrition or increase)	Reason for movement	Restorative action	Lease contracts returned
1	Chiswick	10 (9)	-1	Vehicle need – purchased alternative car	Partners working with cluster champion to recruit	8/9
2	South Gosforth	10 (9)	-1	Left area for new job (may return in Feb and wants to return to trial)	LV feeder area exhausted over last 6 months; unlikely to backfill	9/9
3	Wylam	10 (10)	0			9/10
4	Marlow	10 (9)	-1	Vehicle need – purchased alternative car	Partners working with cluster champion to recruit	9/9
5	South Shields	10 (11)	+1	Additional trial participant engaged		11/11
6	Chineham	10 (10)	0			9/10

7	Whiteley	10 (10)	0			10/10
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The attrition rate to date signifies a 2.9% net change, post submission of the first seven clusters to Ofgem. Some fluctuation in cluster composition is to be expected as participants’ personal circumstances may change over time; these changes are not within the control of the project and, although the contracts in place with these customers are binding, it is not deemed appropriate for an LCNF project to penalise volunteer participants for a decision to withdraw. The attrition rate is stabilising, as far as possible. It is imperative that momentum is maintained in project delivery in the best interests of the customers and in the interests of continuing to achieve best value for money in all customer engagement project activity. It has been with these two elements in mind that the project has worked with Nissan to reach agreement for them to ring fence EVs; this has enabled the project to authorise the order and delivery of ten EVs pre-Christmas, to meet customers’ needs and to mitigate against further attrition.

The remaining (58) EVs are scheduled to be ordered and delivered in January 2014, across the initial seven clusters, that are in the process of being installed with the Esprit technology and charging points. With the vast majority of customers now having signed lease agreements, it is critical that delays are avoided; the alternative is high risk of losing clusters. Table 3-5 shows the current overall composition of clusters established and in progress. Clusters comprising at least 100 participants in total are expected to be established by March 2014.

Table 1-5: Technical trial clusters submitted to Ofgem and in progress of establishment

DNO licence area	Network type	Cluster	No. of households on LV feeder	No. of EVs / customers	Actual / Estimated establishment date	EV totals
Submitted						
SEPD	Urban	Chiswick	138	9	27/09/2013	68
NEDL	Urban	South Gosforth	57	9	27/09/2013	
NEDL	Rural	Wylam	72	10	27/09/2013	
SEPD	Urban	Marlow	139	9	30/09/2013	
NEDL	Urban	South Shields 1	54	11	14/10/2013	
SEPD	Urban	Chineham	125	10	11/11/2013	
SEPD	Urban	Whiteley	58	10	13/11/2013	
In progress – urban						
SEPD	Urban	Chineham 2	82	6	Jan-13	84
NEDL	Urban	South Shields 2	62	10	Jan-13	
In progress – rural						
SEPD	Rural	Lyndhurst	34	7	Feb-13	95
SEPD	Urban	Watlington	152	4	Feb-13	

In progress – business						
NEDL	Business	Your Homes	NA	10	Feb-13	105

1.2 Current status of social trial recruitment

The main risks to the social trials at the outset of the project were considered to be the risk of not recruiting 100 participants to meet SDRC 9.5.3 due end August 2014 and the monthly price point being higher than the technical trial. However to date recruitment does not appear to be an issue.

Mitigation has been through a structured and staggered marketing approach:

1. High profile information on www.myelectricavenue.info.
2. Initial press release on www.green-car-guide.com to manage interest given that focus still on technical trials and to manage resource and customer expectations.
3. LCNF conference and new marketing materials.

The interest experienced in the social trials has enabled successful recruitment of more than a quarter of the required participants in approximately 3 months. It is noted that the primary publicity and marketing planned for the social trials will be derived from the early technical trial cluster implementation. The BBC have already expressed interest in reporting on the first operational technical cluster; this and other similar news stories are expected to help in the recruitment of social trial participants.

Table 1-2: Social trial recruitment status

Social trial EOI	Social trial Ordered	Social trial credit passed
526	33	27

13 EVs have been ordered for delivery over the Christmas period 2013.

1.3 Key Issues

The Change Request to the project direction is awaiting acceptance by Ofgem following three iterations of information being provided by the Project, including the change request, additional evidence and responses to specific questions. Uncertainty regarding the acceptance or rejection of this document increases the doubt as to the progression of the project whilst increasing the current and future management workload. (Refer to

Table 3-1 and Table 3-2.)

The level of risk borne by SME project delivery lead is becoming unsustainable. Spend of over £730k is required to secure current clusters and meet project direction conditions associated with participant recruitment. However, this spend will be at risk until either the requirements are met or a change request to update the requirements is approved. There is a risk of other participants withdrawing from established clusters. This is further increasing as time progresses without EVs being provided; this mitigation will be implemented once the issue above is resolved.

2 Consistency with full submission

The project has proceeded in accordance with the full submission with respect to the planned work activities, procedures being established and adhered to. In addition, all deliverables to date have been achieved either on or ahead of the schedule detailed in the Project Direction.

An important clause under the Project Direction (8(i)) is the establishment of seven clusters of ten Trial Participants. The project team have presented evidence to Ofgem to support the achievement of this clause, comprising proof of customer contractual commitment (signed Declarations of Interest, contracts and successful credit checks) and evidence of the physical suitability of cluster locations (ability to install all required charging points and connect to the network and communications systems).

As described in section **Error! Reference source not found.** there has been movement in customer numbers within some clusters, positive and negative, since the submission of the cluster evidence reports. A review has been conducted to fully understand the implications for the expected learning that these changes in participant numbers mean and we are confident that the impact is negligible. In fact, additional potential learning points have been identified because of the cluster permutations (e.g. in some clusters a high proportion of EVs will be connected to the same phase, enabling learning about the impacts of this imbalance).

We continue to promote and engage additional clusters and are now very confident that the target of 100 participants recruited into the technical trials in total will be met before the March 2014 deadline. However it may be necessary to seek approval for an updated permutation of clusters through the change request process, an event provided for by the project direction clause 8(ix), following the minor fluctuation in participant numbers experienced by some clusters between contract signature and issue of EVs.

Current expenditure is in line with financial governance; however, the forecast for the project budget diverges from the Full Submission because of:

- Correction of a transcription error in the Full Submission spreadsheet, which reduced the overall project budget by £220k and changed the proportional distribution of funding between budget categories. This introduced a requirement to flex the budgets in order to ensure all tasks have sufficient funding availability;
- Increased customer engagement resulting from the additional terms in the agreed Project Direction.

A Change Request has been submitted to Ofgem to request alterations to the Project Direction, (reference section **Error! Reference source not found.**) in line with these issues.

2.1 Change request

2.1.1 Reason for Change Request

When the contract, the Project Direction (PD), was accepted in December 2012, it was agreed with Ofgem that a change request to update the budget would be submitted because:

- a) a transcription error in final submission spreadsheet had reduced the total amount of project funding requested by £220k and altered the intended distribution of funds between Tasks and Categories¹; and
- b) Ofgem had added conditions to the Project Direction relating to trial participant recruitment², which the project team knew would require more customer engagement effort, particularly early in the project, than originally planned.

Changes Requested

The Change Request seeks changes to almost every Task / Category total in the project budget reflecting: the factors above; other savings/additional costs found due to improved understanding of costs since bid submission; and budget movements between Tasks to make accounting easier.

The Change Request does not seek a change to the total project budget nor the project scope as accepted in the original Project Direction. Hence the full original scope is being met, and being delivered for £220k less money than was originally intended³.

The changes are needed to ensure the project can be delivered as per the planned scope, while complying with governance requirements to keep spend against budget categories within specified limits. The changes will also improve clarity of reporting, as the project is required to report against the original Task / Category allocations (which are now inaccurate) unless the changes are accepted.

2.1.2 Progress

The Change Request was submitted in August 2013. Ofgem have given two rounds of feedback to which EA Technology and SSEPD have responded with additional supporting evidence and clarification.

¹ EA Technology and SEPD raised errors with the Project financial spreadsheet with Ofgem in November 2012 prior to the project being awarded. We agreed with Ofgem that this will be managed within the project, but noted that some lenience would be needed in order to flex budgets between tasks and categories.

² The Project Direction introduced additional risks to the project, namely the need to recruit cluster participants for the technical trials in parallel, securing the intent to participate from 100 participants in total including seven clusters of ten participants, before funding to deliver EVs to participants could be accessed. At the time of bid submission, it had been planned to recruit one cluster at a time, and deliver cars to clusters as they were formed. Restrictions on budgets in terms of Task limits and limits by financial year have further complicated this situation.

³ As EA Technology had already agreed to several fixed price contracts, we have had to make sacrifices to accommodate the reduced budget, changing rates to accommodate the project.

The full allocation of contingency (allowed for FY14) was requested and allocated in order to keep the project progressing. The use of contingency in this instance was to provide bridge funding up until the CR was agreed. This contingency funding is essential, but will be spent up by the end of December 2013.

3 Risk management

A risk register was developed for the project at the bid stage. This document has since been adopted by the delivery team as a key management tool for the project, and expanded to reflect changes in risks or mitigation as they occur. The risk register is a live document that was updated in line with the recommendations made by Ricardo in their initial independent review of the project.

In this section of the progress report, we purposely do not discuss all risks in the risk register, instead focusing on those of key significance to the project. The current version of the risk register is included in Appendix A.

3.1 Recruitment Risks

Technical trials

There were a number of risks relating to the recruitment of customers for participation in the trial based on the experiences of previous Tier 2 LCN Fund projects. Previous projects have encountered severe difficulties in recruiting sufficient customers to participate in trials to provide statistically significant data to derive learning for the project. This experience led to an anticipated level of customer participation being low relative to the effort expended on customer recruitment.

Experience to date on the project however has proved otherwise, with 1,985 registrations of interest received, 246 champions identified (working on the ground to recruit their neighbours) seven clusters (of at least ten trial participants in each cluster) having been submitted to Ofgem by 13 November 2014 – four months ahead of schedule. As such, the original risks are now considered to have a lower likelihood of occurring than at the time of bid submission. Due to the successful recruitment of participants to the technical trials earlier than anticipated, the risk to the project now lies in the attrition rate for those recruited participants.

Section **Error! Reference source not found.** details the risks that have been considered the most critical to the project up to this point, detailed in order of priority. It is significant to note that all of these 'priority risks' have now been either fully or substantially mitigated.

3.1.1 Risks outlined from the initial risk register

Originally, a significant risk to the project was focused on the recruitment of clusters but was specific to the potential delays between initial contact and securing funding as outlined in the Project Direction (PD). Experience to date is now moving the significant risks onto the loss of clusters resulting from delays in the release of funding for establishment of clusters.

Table 3-1: Risk Register ID 074

Risk ID 074	<p>Change Request to update Project Direction (from v1.10) is rejected by Ofgem, preventing movement of funds between Categories and Project Tasks.</p> <p>Severely impacted Categories if rejected are Labour, Decommissioning and Contingency, severely impacted Tasks are Customer Engagement and Cluster Establishment (including funding of vehicles and purchase of equipment).</p>
Mitigation	<ul style="list-style-type: none"> - Ensure clarity of rationale behind update request is clear within the document; - Ensure document is reviewed by SSE Regulation Team; - Open dialogue with Ofgem to resolve issue; - Continue responding to Ofgem’s requests for clarification and offer meetings / teleconferences to resolve concerns they may have.
Impact	Severe
Likelihood	Probable
Mitigating actions taken	All above points undertaken to date, awaiting acceptance or further questions from Ofgem.

Table 3-2: Risk Register ID 075

Risk ID 075	<p>Change Request to update Project Direction (from v1.10) is delayed by Ofgem, preventing movement of funds between Categories and Project Tasks in the short term.</p> <p>In order to continue the project without the agreement of a revised Project Direction, release of project contingency is required.</p> <p>Release of project contingency will enable continuation of the project until end of November 2013.</p> <p>The project will be in breach of Project Governance if Ofgem spending category limits are exceeded by more than 10% without prior authorisation.</p>
Mitigation	<ul style="list-style-type: none"> - Utilise Project Contingency to bolster tasks running short on funds until Project Direction update request is approved. - Use of contingency requires approval of the Project Steering Group.
Impact	High
Likelihood	In progress.
Mitigating actions taken	All above points undertaken to date, awaiting acceptance or further questions from Ofgem.

Table 3-3: Risk Register ID 040

<p>Risk ID 040</p>	<p>Loss of fully engaged participants from established clusters while additional customers are being recruited to complete the total requirement for 100 participants and secure funding. There is a high risk that clusters will be signed -up to participate in line with the SDRC criteria (and Project Direction requirements) but if funding is not released for a significant period of time the cluster members will not participate when required, due to the time -lapse between sign up and checks / surveys leading to cluster implementation (i.e. charging point installation and EV delivery).</p> <p>A secondary element of risk relates to current ‘near’ clusters that may not achieve the full number of participants required per low voltage feeder to class as additional clusters of at least 10 participants. Delaying implementation of such clusters however creates the risk that no potential participants, currently willing to participate, are open to forming a smaller cluster at a later date. Clusters in this situation would still be valuable to form part of the required 100 participants signed-up.</p> <p>Potential impacts from the above risks include:</p> <ul style="list-style-type: none"> • Not meeting SDRCs as currently willing cluster participants become reluctant to participate due to delays. • Bad publicity from potential cluster participants who do not eventually form a cluster.
<p>Mitigation</p>	<p>- Work to deliver sufficient clusters to Ofgem for funding requests sufficiently early to enable funding release.</p> <p>- Maintain customer engagement throughout process to reduce chance of customers leaving.</p> <p>Sep-2013: Maintaining regular (2 per month) meetings with Ofgem to provide frequent, detailed updates on cluster establishment process and the timescales for cluster approval.</p>
<p>Impact</p>	<p>High</p>
<p>Likelihood</p>	<p>Probable</p>
<p>Mitigating actions taken</p>	<p>Seven clusters of at least ten were submitted to Ofgem by 13 November 2013, four months ahead of schedule.</p> <p>In order to mitigate against further attrition and to endeavour to replace customers where possible, the project team is:</p> <ul style="list-style-type: none"> § Working with cluster champions in Chiswick, Marlow and South Gosforth to backfill the one customer drop out in each of these clusters <ul style="list-style-type: none"> ○ Chiswick – no additional customer available ○ Marlow – cluster champion generating further interest ○ South Gosforth – cluster champion re-leafleting the LV feeder area § Securing customer-signed lease agreements from all customers within the first seven submitted clusters to mitigate against further attrition <ul style="list-style-type: none"> ○ The return rate of lease agreements is detailed in Table 2, representing a 96% return rate to date § Authorising delivery (at EA Technology’s financial risk), pre-Christmas, of the first ten most urgent EVs, to those customers who are in most need of cars – to mitigate the risk of losing further customers § Managing customer expectations on car delivery and trial set up through communications tailored to each of the submitted seven clusters (example letter in Appendix B) § Progressing two other potential clusters of ten <ul style="list-style-type: none"> ○ South Shields 2 ○ Your Homes - as a cluster of ten trial participants and ten EV. The customers will charge daily on a rota basis, which is mirroring a real-life situation as this is already happening in many business EV charging scenarios. See s.3.1.4 regarding additional learning to be derived from this set up § Working towards over-achieving on cluster / customer numbers, as illustrated by Table 3-5 below – to achieve at least 100 customers signed up by February 2014.

Social trials

Following successful recruitment of the first social trial participants, a new risk has been presented and runs in parallel with the technical trial. Due to a delay in authorising car orders, there is now a risk that those who are currently willing to take part, become less engaged and decide not to take part because of these delays. The contract with Nissan required further review following verbal agreement and because of further internal review within Nissan, the length of the contract has been revised from 24 months to 18 months. This risk was mitigated by contacting each social trial participant individually and explaining the potential impact this change would have on the total cost.

3.2 Procurement Risks

To date, the provision of both EVs and trial equipment is progressing as required to meet the project delivery requirements. Planning for the future implementation of the remaining clusters is not anticipating any issues with this.

3.3 Installation Risks

Installation of trial equipment in the initial clusters is finding that in some instances, communication between the Intelligent Control Boxes (ICBs) located in participant properties, and the monitor controller (MC) in the sub-station is not functioning as expected. This is limited to a small proportion of devices, and at this very early stage of deployment, we are yet to fully understand the magnitude of the issue across the clusters. There are simple mitigation options open to the project team including optimising settings and installation of repeaters. Understanding the viability in terms of cost and performance for control schemes on this scale using Power Line Communications (PLC) is an extremely valuable learning point for GB DNOs, we will disseminate any communication issues within the next reporting period. We re-iterate that it is early days however it is prudent to raise any issues early.

As part of the cluster checks, a PLC survey was undertaken to ensure suitability, so far as was reasonably practicable, for the properties participating in the project; during this test, a stable connection was made with the properties now experiencing difficulties. These tests were conducted to provide some confidence but it is understood that they only represent a point in time - further testing and adaptation of the technology and settings is underway to identify the cause and mitigate against it for future clusters.

3.4 Other Risks

The key, high priority risks have been detailed in the appropriate section above, 3.1.1, all remaining risks are included within Appendix A - Risk Register v4.16.

4 Successful delivery reward criteria (SDRC)

4.1 SDRC Overview

The below table details the status of each SDRC outlined in the Project Direction document; additional information regarding completed and in-progress SDRCs is below.

Please note that all SDRCs that are currently flagged as ‘Not Started’ were not planned on being underway at this point in the project and so should be considered as on-schedule.

Table 4-1: SDRC Overview

SDRC		Due	Description	Status
9.1	9.1.1	28/02/2013	The provision of a report outlining key areas of learning in the identified areas, with recommendations. The reports will be written such that they can be published in the public domain for an audience of: DNOs, Ofgem or other interested third parties who may wish to lead a LCN Fund project in collaboration with a DNO.	Complete.
9.2	9.2.1	30/04/2013	Make available the initial contract template used between SEPD and EA Technology together with supporting guidance of the thinking behind key clauses. This will be made available to Ofgem and other DNOs as a starting point for use in future projects.	Complete.
	9.2.2	31/10/2015	Review of the contract put in place between SEPD and EA Technology. A review of the initial contract developed in 9.2.1 focussing on what worked well, what didn't work well, and what should be done differently in the future.	Not started.
	9.2.3	31/12/2015	An updated contract template taking into account learning from SDRC 9.2.2.	Not started.
9.3	9.3.1	31/10/2015	Report detailing processes established and utilised throughout the project including templates of any forms (e.g. work orders for SSEC staff) and records of meetings/regular communications created as part of the process. This will include an evaluation of the collaboration between SSEPD and Northern Powergrid with a 3rd party interface.	Not started.
	9.3.2	31/10/2015	A framework to enable update suggestions to SSE policies and/or procedures, identified during the course of the project will be provided, (e.g. A procedure detailing the necessary steps when considering a customer's request for an EV charging point).	Not started.
	9.3.3	31/10/2015	An assessment from the participating DNO of the level of effort expended on Project Management of the I ² EV task by the staff involved in comparison to previous innovation projects.	Not started.
9.4	9.4.1	31/07/2013	The provision of 6 monthly independent reviews of the project and technology with specific inclusion of improvements and adaptations to working practices incorporated by the project team following the previous independent review. a) Produce six monthly reports (highlighting strengths and improvement areas) to be tabled at steering group meetings. b) Produce response to six monthly report, detailing improvements planned by Project Steering Group, because of the review.	Complete
		31/01/2014		In progress.
		31/07/2014		Not started.
		31/01/2015		Not started.
		31/07/2015		Not started.

SDRC		Due	Description	Status
		31/12/2015		Not started.
9.5	9.5.0	28/02/2013	Customer engagement: Submission of customer engagement plan and data protection strategy for Authority approval (1 February 2013).	Complete.
	9.5.1	30/09/2013	Sign up of 3 cluster groups.	Complete.
		31/12/2013	Sign up of 5 cluster groups.	Complete.
		31/03/2014	Sign up of 100 customers in at least 7 cluster groups.	In progress.
		31/08/2014	Sign up of 10 cluster groups.	In Progress.
	9.5.2	31/08/2014	All cluster funding allocated due to successful establishment of clusters.	In Progress.
	9.5.3	31/08/2014	Social trials: Minimum of 100 EV drivers signed up to have their driving habits recorded (month 18 following CEP, August 2014). a) Reports presented to the monthly project meetings to capture and log progress in signing up customers to the EV trials. b) Six monthly reports to steering group on trial engagement progress.	In Progress.
9.6	9.6.1	31/10/2015	A report documenting the finding from the socio-economic analysis on public reaction to the technology.	Not started.
9.7	9.7.1	30/06/2015	Documentation describing: a) Views of the OEM community of the impact (if any) that cycling of EVs (or HPs) may have on their product(s) and end of life b) Recommendations of suitable cycle times for EVs (and possibly Heat Pumps) for demand-side response c) Evidence of whether this solution would be feasible or not combining learning from SDRC 9.5 and SDRC 9.6.	Not started.
9.8	9.8.1	31/11/2015	Modelling to understand additional headroom available / other network benefits from using the Technology. a) The models will assess the percentage of thermal and voltage headroom estimates produced. b) The project will deliver an updated Solution template(s) specific to the Technology, and any updated EV charging profiles for use in the GB Smart Grid Forum modelling.	Not started.
	9.8.2	31/11/2015	Potential cost savings and carbon emission savings using DECC published carbon intensity figures. If technology is unsuccessful, reasons why will be stated.	Not started.

5 Learning Outcomes

5.1 Summary of key learning outcomes delivered in the period

5.1.1 Commercial

The development and establishment of the Novel Commercial Arrangement has completed the initial stage of work, with the remaining outputs planned for the last few months of the project once the arrangement has been 'tested.' As such, a significant number of learning points have been identified in relation to the work completed to date; these are detailed below:

- Whilst listing the Partners/Suppliers in the Project Direction enables the delivery of the project to be fixed to the commercial organisation named in the bid document it potentially places the project delivery lead in a weak position when negotiating sub-contracts. This is particularly evident when specific packages of work could be delivered by a number of companies within the agreed budget. Allowing projects the ability to tender for packages of work after the bid stage may be better value for money for customers.
- The risks for the 3rd Party Lead Supplier could be mitigated by identifying the key clauses that are expected to promote the most discussion with each partner/supplier before the Principal Contract is agreed with the relevant Lead/Funding DNO. These clauses could be negotiated and agreed with Partners/Suppliers before the Principal Contract is signed. In an ideal world, sub-contracts with partners/suppliers should be negotiated and agreed at bid stage. However, the costs associated with completing this task may be prohibitive;
- The type of organisation, size of organisation, scope of works and value of the associated Task Order⁴ will influence contract negotiations. The approach taken for negotiating contracts therefore needs to vary with each partner/supplier taking into account each of these variables;
- Negotiating the same agreement with multiple suppliers can take a considerable amount of time, particularly when dealing with multiple parties (contract specialists and the project manager for the agreed scope of works). Completing an initial contract review followed by a conference call with the relevant personnel can speed up the negotiation process (rather than protracted email communication);
- The terms under which the LCN Fund Tier 2 contracts are issued (ref. LCNF Governance document and project specific Project Directions) are highly focussed on ensuring best value and minimising risk for the end customer. Since LCNF innovation projects by definition involve risk and uncertain value, this focus results in the risks and sometimes costs associated with innovation being passed back to the project delivery lead. The level of risk can be unsustainable for the project delivery lead, particularly where the lead is a 3rd party SME rather than the funding DNO. It is recommended that consideration be given to how best to ensure the LCNF Tier 2 projects retain the requirement for providing best value for money to

⁴ Supplementary contractual and obligating document that includes task description and expenditure limitations.

the end customer whilst also ensuring that businesses including SMEs retain the incentive to participate in such projects;

- The principal contract from SSEPD to EA Technology led to lengthy negotiations with project partners and sub-contractors as the aim was to back-to-back the contracts through the project.
- Smaller sub-contractors (e.g. ZCF) were unable to accept the large, and in some clauses, unlimited liabilities stated in the principal contract. This also caused significant negotiations between ZCF and one of their sub-contractors.

5.1.2 Technical

Working with two DNOs, (SSEPD & NPG) to establish clusters of trial participants has highlighted the different working methods between the two companies, specifically with respect to network planning. This has resulted in occasional mis-communication early in the cluster establishment process. This has been overcome by implementing more robust communication channels and procedures including:

- Frequent, regular teleconferences;
- Weekly and monthly reporting mechanisms;
- Specific reporting templates for:
 - tracking participant registrations;
 - recording cluster interest; and
 - progress of technical checks.

5.1.3 Customer Engagement

The key learning points regarding customer engagement for this period relate to the approach taken by the project partners to successfully recruit customers to both My Electric Avenue trials, but also in relation to the attrition rate of those clusters submitted to Ofgem.

- Shared management of communication with customers from the project has proven to be extremely effective. Fleetdrive Electric and Zero Carbon Futures are extremely experienced in communicating directly with customers on a daily basis. To maximise channels of communication and skills available to the project, both Fleetdrive Electric and Zero Carbon Futures took on delegated responsibility for communication to SSEPD (SEPD and SHEPD) and NPG (YEDL and NEDL) areas respectively. This has allowed for flexible, timely and efficient management of communications to customers, and continued engagement with cluster champions.
- As a result of delegated responsibility regarding communications to customers, weekly teleconferences and meetings with project partners are an absolute necessity for effective project management and to allow co-ordinated communications and ensure a consistent shared message to customers across both distribution areas.
- Open, timely and transparent communication with customers has proved key to mitigating further attrition from clusters; this has been supported by expedient authorisation of EV delivery to the ten customers considered most at risk of pulling out due to perceived delays in receiving their cars.
- Task 4 activities, namely installation of equipment, have also required liaising with customers. The process of scheduling and co-ordinating activities has further proven the need for frequent communication between project partners, and also internally between teams. The

nature of this research project and equipment being tested means that progress is rapid and changeable on a day-to-day basis.

- The project should have taken a clearer steer on permissions concerning publicity from the outset. This has been corrected following a potential participant publishing a separate press release about a cluster, and posing as an affiliate of the project.
- Stage gate approach to customer engagement has proven efficient and supported budget management. Due to the unanticipated high level of interest, project resource has had to focus on key clusters (output driven selection) and a 'cut off' point has had to be enforced for any new expressions of interest.
- Learning with regards to business clusters – legal arrangements over land ownership and permissions were not anticipated and meant that developing, or establishing business clusters has a separate, additional layer of process involved compared to residential clusters (i.e. Kidlington/ Drayson Racing Technologies).
- Use of planned media dissemination has been successful in raising the profile of the project and Project Partners over the last 6 months.

5.2 An overview of the Project's overall approach to capturing the learning and disseminating

Learning is captured in a learning log that is kept updated on an ongoing basis. The project has ensured dissemination of documentation, reports and key deliverables through a variety of mediums in addition to the requisite process for submitting documents to Ofgem. EA Technology strategically manages dissemination with support from Automotive Comms, an EV communications specialist. A contacts list has been developed to capture stakeholders from Ofgem, all GB DNOs, project partners, energy sector, Government bodies plus other relevant organisations.

Dissemination routes for the SDRCs have been and will continue to be through press release to media contacts, branded email with link to press release on www.myelectricavenue.info to all contacts, together with links through the project's social media outlets (LinkedIn, Twitter and Facebook). Three project newsletters have been disseminated to over 500 project contacts (each issue); this acts as another tool for dissemination of documentation, reports and key deliverables.

These routes will also be utilised where applicable to disseminate wider project learning to those interested parties.

5.3 The main activities towards third parties which have been undertaken in order to disseminate externally the learning mentioned in 5.1

5.3.1 EA Technology – External Dissemination

My Electric Avenue dissemination to date has utilised various communication channels to boost awareness and publicity around the project, ultimately to engage customers and other interested parties. External dissemination follows a planned schedule of newsletters and press releases, appropriately timed to produce maximum impact following key events in the course of the project. A record of the planned dissemination, which has been carried out to date, is shown below.

Date	Method	Number
Newsletters		
20 November 2013	Newsletter issue 3	498 project contacts – including Ofgem, all GB DNOs, DECC, OLEV, TSB, National Grid, consultants and mailing list via myelectricavenue.info
28 August 2013	Newsletter issue 2	
26 June 2013	Newsletter issue 1	
Press releases		
13 November 2013	Press release: My Electric Avenue announces first customer clusters to take part in ground - breaking electric car trials	498 project contacts – including Ofgem, all GB DNOs, DECC, OLEV, TSB, National Grid, consultants
	Twitter	@MyElectricAve #LCNF
	News on websites	Uploaded to myelectricavenue.info and here: http://www.eatechnology.com/news/my-electric-avenue-announces-first-clusters
01 November 2013	Press release: Drive an all -electric Nissan LEAF as part of My Electric Avenue’s Social Trials	Uploaded on www.Green-Car-Guide.com
	Twitter	@MyElectricAve
23 July 2013	Press release: My Electric Avenue charges into action, with support from Oxford -based Drayson Racing Technologies	498 project contacts – including Ofgem, all GB DNOs, DECC, OLEV, TSB, National Grid, consultants
	Twitter	@MyElectricAve
	News on websites	Uploaded to myelectricavenue.info and here: http://www.eatechnology.com/news/my-electric-avenue
	News press	http://www.newspress.co.uk/ (is the leading automotive news site with more than 3,000 approved/accredited journalists viewing the site per day)

To date (9 December 2013) over 70 news items covering the My Electric Avenue project have also been published via industry titles, for example:

- Autocar
- Business Green
- Engineering & technology
- Energy Savings Trust
- Green Car Guide
- Oxford Times
- Robert Llewellyn
- Smarter Networks (ENA)
- Wired

Publicity for the project and trials has been further supported by the production of videos. High profile videos include an episode of ‘Fully Charged’ presented by Robert Llewellyn aired on 23 July 2013 and coverage provided by BBC Oxford on primetime evening news (18:30 and 22:30) on 18 July 2013. Other videos, which have been generated through the project, include an animated film to introduce the project, which has been used at presentations and events during the course of the project, and edited test drive sessions with clusters across the country. These are available to view via the project website⁵ or YouTube⁶.

Further to planned press releases and newsletters, My Electric Avenue has also shared project news through a combination of emails, LinkedIn, and Twitter. The My Electric Avenue group on LinkedIn has 103 members; Twitter activity is ramping up with 105 tweets, 273 followers and 522 following.

My Electric Avenue has also been presented and represented at several industry events. A record of these is provided below.

- Industry & Parliament Trust Reception – July 2013 - My Electric Avenue case study feature in report – Dave A Roberts, Gill Nowell
- Cenex LCV2013 - September 2013 - (Panel discussion) – Dave A Roberts
- HEVC – November 2013 - Paper Presentation – Mary Gillie
- LCNF Conference - November– My Electric Avenue stall/presentation and panel discussion – Dave A Roberts, Dan Hollingworth, Tim Butler, Gill Nowell, Richard Potter, Mary Gillie

The team presented and held a stand at the 2013 LCN Fund Conference in Brighton, providing information on the approach taken across the project. Specific learning relating to the customer recruitment process was covered in two presentations at the conference.

The project has ensured dissemination of documentation, reports and key deliverables through a variety of mediums in addition to the requisite process for submitting documents to Ofgem. EA Technology strategically manages dissemination with support from Automotive Comms, an EV

⁵ www.myelectricavenue.info

⁶ <http://www.youtube.com/user/MyElectricAvenue>

communications specialist. A contacts list has been developed to capture stakeholders from Ofgem, all GB DNOs, project partners, energy sector, Government bodies plus other relevant organisations.

During the LCNF event Tom Greatrex MP, SSEPD's Mark Mathieson, ENA's David Smith, Northern Powergrid's Jim Cardwell all had test drives in the Nissan LEAF. According to the ENA, @MyElectricAve accounted for over 40% of all #LCNF2013 tweets.

5.4 Internal dissemination activities

In the latest reporting period, EA Technology has disseminated progress and key learning internally through:

- Presentations for staff within the Future Networks and Business Development divisions of the business;
- Progress update meetings with EA Technology project steering group members and company board members;
- Company internal social network.

6 Business case update

At the time of writing, there have been no changes to the anticipated benefits to be gained by the Project, if it progresses through to completion with projected costs remaining within the overall budget.

7 Progress against budget

It should be noted that the below expenditure progress is still compared against the budget detailed in version 1.10 of the Project Direction, issued in December 2012 . The Change Request (see section 2.1) seeks to update the budget, changing the distribution of funding across budget categories and tasks to mitigate the impact of transcription errors in the budget as originally submitted and the need to re-plan project activities to meet additional conditions imposed through the project direction . As the Change Request is not yet accepted, the original budget remains valid. Hence this report shows considerable variation from that budget.

7.1 Current project expenditure

The project expenditure to date, (data extracted to end of November 2013), is detailed in Table 7-1 and compared against the forecast expenditure at March 2014, end of the financial year. It can be seen that to date, expenditure is below where it was forecast in the project bid submission; this is driven primarily by the funding restrictions enforced through the project direction preventing full implementation of technical trials.

Table 7-1 Current expenditure against project category

	Total Planned Expenditure at March 2014 (£k)	Current Expenditure (November 2013) (£k)	Utilised % of Planned Expenditure at November 2013
Labour	£ 108.74	£ 65.52	60%
Equipment	£ 258.13	£ 6.02	2%
Contractors	£ 1,436.50	£ 967.18	67%
IT	£ 0.48	£ 2.16	453%
IPR Costs	£ -		
Travel & Expenses	£ -		
Payments to users	£ 88.09		0%
Contingency	£ 156.34		0%
Decommissioning	£ -		
Other	£ 22.02		0%
Total	£ 2,070.30	£ 1,040.88	50%

7.2 Project funding allocations by task and category

The overall project expenditure to date and projected forward remains within the overall project budgetary restriction outlined in the Project Direction. The project is continuing in line with the plan outlined as part of the ongoing discussions relating to the Change Request to the Project Direction.

Limited release of the funding restrictions were authorised by Ofgem on 29 October 2013, as a result of the high level of progress experienced in customer recruitment for the project.

The available contingency for the current financial year has been released to enable the continuation of customer recruitment in advance of the change request being finalised.

The change request under review by Ofgem comprises changes to the planned financial structure of the project due to the following criteria:

- A) Increased customer engagement resulting from the additional terms in the agreed project direction;
- B) Correction of the transcription error with the subsequent requirement to flex the budgets in order to ensure all tasks have sufficient funding availability;
- C) Moving specific task elements for project partners/suppliers between tasks to aid in the project management activities;
- D) Cost variations within the project resulting from new information.

The significant, proportional changes between categories derive from the transcription error introduced during the bid submission process. However these changes are relatively minor within the overall project. The majority of changes to the project finances occur within project categories but between tasks. A high level summary of the reason for each change is provided in Table 7-2, full explanation has been provided in the Change Request and associated supporting evidence.

Table 7-2 Projected expenditure against budget including projected variance

Task ID	Ofgem Categories / Project Tasks	Original PD	Forecast Expenditure	% Expenditure of Budget	Justification for change.
	Labour	£ 222.25	£ 324.01	146%	Transcription error resulted in a disproportional impact on the Labour category, driving the below increases.
00	Novel Commercial Arrangement	£ 19.92	£ 9.00	45%	Novel commercial arrangement completed in less time than anticipated.
02	Customer engagement	£ 1.27	£ 1.64	129%	Minor increase in anticipated effort required by SS&PD staff.
03	Integration of the Technology with charging points	£ -	£ -	0%	No change.
04_2	Install technology and charging points	£ 37.44	£ 28.21	75%	Less effort forecast for installation of trial equipment by SS&PD staff.
05	Monitoring the trials	£ 16.06	£ 16.35	102%	Minor increase in anticipated effort required by SS&PD staff.
06	Trial participant interviews	£ 1.28	£ 1.64	128%	Minor increase in anticipated effort required by SS&PD staff.
09	Project recommendations and implementation	£ 6.73	£ 12.88	191%	Minor increase in anticipated effort required by SS&PD staff.
10	Dissemination	£ 30.48	£ 57.03	187%	Increased effort experienced and forecast for project dissemination activities by SS&PD staff.
11	Programme Management	£ 109.07	£ 197.26	181%	Increased effort experienced and forecast for project dissemination activities by SS&PD staff.
	Equipment	£ 484.71	£ 279.61	58%	
04_2	Install technology and charging points	£ 484.71	£ 279.61	58%	Equipment costs significantly reduced to provide additional funds for customer engagement activities.
	Contractors	£ 3,120.44	£ 3,271.56	105%	
00	Novel Commercial Arrangement	£ 194.05	£ 172.46	89%	Novel commercial arrangement completed in less time than anticipated.
01	Initial background - evaluation of initial trial	£ 14.48	£ 16.43	113%	Minor increase in anticipated effort required to complete the planned activities.
02	Customer engagement	£ 209.08	£ 501.65	240%	Significantly extra effort required due to additional terms included in Project Direction v1.10.
03	Integration of the Technology with charging points	£ 42.99	£ 24.16	56%	Less effort forecast for completion of work activities.
04_2	Install technology and charging points	£ 659.71	£ 193.00	29%	Less effort forecast for installation of trial equipment by contracting staff.
04_1	Establishment of Customer / Cluster trials	£ 346.42	£ 635.26	183%	Significantly extra effort required due to additional terms included in Project Direction v1.10.
05	Monitoring the trials	£ 103.77	£ 148.93	144%	Significantly extra effort required due to high volume of interested potential participants.
06	Trial participant interviews	£ 202.36	£ 255.52	126%	Greater effort anticipated for undertaking interview activities than at bid submission stage.
07	Network Modelling	£ 214.84	£ 238.74	111%	Minor increase in anticipated effort required to complete the planned activities.
08	Consultation with EV manufacturers - cycle times	£ 33.16	£ 20.70	62%	Less effort forecast for completion of work activities.
09	Project recommendations and implementation	£ 273.23	£ 129.78	47%	Less effort/cost required for completion of work activities.
10	Dissemination	£ 230.73	£ 405.55	176%	Significantly extra effort required due to additional terms included in Project Direction v1.10.
11	Programme Management	£ 595.62	£ 529.38	89%	Minor reduction in planned management effort.
	IT	£ 3.27	£ 3.75	115%	
05	Monitoring the trials	£ 3.27	£ -	0%	IT equipment not required for monitoring of trials.
10	Dissemination	£ -	£ 3.75		IT equipment required for hosting of project website and database.
	Travel & Expenses	£ 107.43	£ 2.80	3%	
04_1	Establishment of Customer / Cluster trials	£ 105.15	£ 0.40	0%	Transcription error resulted in an incorrect initial value.
09	Project recommendations and implementation	£ -	£ 0.20		Minor travel & expenses anticipated for this task.
10	Dissemination	£ -	£ -	0%	
11	Programme Management	£ 2.28	£ 2.20	96%	Minor travel & expenses anticipated for this task.
	Payments to users	£ 311.76	£ 225.00	72%	
04_1	Establishment of Customer / Cluster trials	£ 199.18	£ 225.00	113%	Transcription error resulted in an incorrect initial value.
12	Project Contingency	£ 112.58	£ -	0%	Transcription error resulted in an incorrect initial value.
	Contingency	£ 400.39	£ 512.50	128%	
04_1	Establishment of Customer / Cluster trials	£ 82.07	£ -	0%	Transcription error resulted in an incorrect initial value.
12	Project Contingency	£ 318.32	£ 512.50	161%	Transcription error resulted in an incorrect initial value.
	Decommissioning	£ 26.29	£ 80.00	304%	
04_1	Establishment of Customer / Cluster trials	£ 26.29	£ 80.00	304%	Transcription error resulted in an incorrect initial value.
	Other	£ 72.88	£ 50.00	69%	
04_1	Establishment of Customer / Cluster trials	£ 72.88	£ 50.00	69%	Transcription error resulted in an incorrect initial value.
	Total	£ 4,749.42	£ 4,749.23	100%	

8 Bank account

The bank account statement for the project, for the date range 1st March 2013 to 11th June 2013 is attached in Appendix B.

9 Intellectual Property Rights (IPR)

9.1 Current Reporting Period

The learning generated in the initial reporting period as part of the work developing the Novel Commercial Arrangement was provided to the LCN Fund, Ofgem and the wider community as part of the SDRC 9.2.1 documentation.

Further development of the novel commercial arrangement has provided additional learning points that have been logged beyond that previously identified and will be disseminated later by the project.

There has been no IP generated that relates to technical development, or operational procedures.

9.2 Next Reporting Period

The next reporting period will cover the implementation of the technical trials across all participants and hence the installation and implementation of the trial equipment. All learning generated as part of this process will be deemed the IP relating to the utilisation of Esprit or Esprit type equipment on DNO networks and so will be part of the IP generated as part of the project.

10 Other

The project is considered to be operating in line with the original submission aims and requirements, but is moving at a faster pace than was originally intended as a consequence of the additional terms introduced to project targets through the Project Direction v1.10. Despite this, My Electric Avenue (I²EV) is delivering wholly in line with the overall budget, spirit and intention of the project bid, whilst protecting the cost to, and interest of the customer. This is despite a shortfall of c£220k from the intended budget due to our transcription error.

It should not be forgotten that a key element of the project is to understand how a non-DNO can manage the delivery of such a project, and whether this model could accelerate the deployment and adoption of new interventions. It is a test case, and not everything experienced to date was, or could have been, foreseen at bid stage. Ultimately, this journey is producing some solid learning, which will benefit future projects, DNOs and supply chain participants who may look to adopt this approach.

11 Accuracy assurance statement

The individual sections of this Project Progress Report have been prepared by the Task Leads managing the distinct areas of the project within EA Technology and collated into a single document by the Programme Manager. The document has subsequently been reviewed by the Project Director, who also holds the position of Future Networks Director for the business before sign-off for issue.

Within SSEPD, the Project Delivery Manager and Regulation Team have reviewed this document prior to final review and authorisation by the Director of Distribution.

Financial details are drawn from the SSE group-wide financial management systems and project bank account.

Prepared by:

Tim Butler	Programme and Task Manager	EA Technology
Gill Nowell	Task Manager	EA Technology

Reviewed by:


Dave A Roberts	Project Director Future Networks Director	EA Technology
Nigel Bessant	Project Delivery Manager	SSEPD
Beverley Grubb	Regulation	SSEPD

Authorised by:

Dave A Roberts	Future Networks Director	EA Technology
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PP Stuart Hogarth	Director of Distribution	SSEPD
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NIGEL BESSANT 23/12/13

Appendix A. Risk Register v4.16

Project Number	8601_12
Project Title	My Electric Avenue (ZEV Project)
Project Manager / Project Director	Tim Butler / Dave A Roberts
Date of Last Update	23-Dec-2014

£ 222,800.00	Total Mitigation Costs
£ 141,500.00	Applied Mitigation Costs
£ 4,763,942.25	Total Contingency
£ 192,842.00	Released Contingency
£ 2,520,092.50	Retained Contingency
£ 2,051,007.75	Remaining Contingency

Risks in relation to Project Direction v1.10.

Risk Identification	Risk Category	Date Risk Raised	Risk Details		Affected Parties	Pre-Mitigation			Post-Mitigation				Contingency Action in Event Risk is Realised	Risk Closed	Date of Risk Closure or Surrenderance	Cost Impact	Contingency Refined	Contingency Released	Contingency Refined	Contingency Remaining	Contingency Alert
			Target date for addressing risk	Risk Details		Likelihood	Severity	Overall Risk	Mitigation Measure	Cost of Mitigation	Mitigation Applied	Responsible for Risk Mitigation									
001	Technical			Limited results (insufficient data gathered) from the trial project make it more difficult to determine technical and commercial viability and hence justification to continue with the project.	EA Technology	Probable	Severe	Severe	Esprit trial will provide indication of expected results and guide measurements required. 6 monthly reviews of data being gathered to determine useability and highlight additional data requirements where applicable.	£ -	No	EA Technology	Unlikely	Severe	Moderate		£ 50,000.00	£ 12,500.00	£ 12,500.00	£ -	
002	Technical			Esprit trials fail due to unforeseen issues cause delay to the overall programme and loss of confidence in product.	EA Technology	Possible	Moderate	Moderate	Laboratory testing to date gives no reason to expect problems with the system trials.	£ -	Yes	EA Technology	Unlikely	Moderate	Moderate		£ 30,000.00	£ 7,500.00	£ 7,500.00	£ -	
003	Technical		12/03/2014	User clusters prove unsuitable to trial product effectively resulting in insufficient data being gathered from loading scenario.	EA Technology	Probable	Moderate	Moderate	Liaise with as many partner and supporting agencies as possible to maximise exposure and contact to target audience groups. Significant discussion already undertaken with Fleetdrive, Nissan and County Councils.	£ -	Ongoing	EA Technology	Unlikely	Moderate	Moderate		£ 10,000.00	£ 2,500.00		£ 2,500.00	
004	General Public			Lack of buy-in from customers for trial participation prevents sufficient numbers of EVs being utilised to provide adequate data. This limits results and hence available, useful data or causes the trial to be extended resulting in delays and additional costs.	FleetDrive Nissan EA Technology	Probable	Moderate	Moderate	Early discussions with Nissan & FleetDrive have resulted in sufficient quantities of EVs promised at suitably low monthly costs to provide good incentives to customer participation. FleetDrive's business is also to identify, target and assess customers.	£ -	Yes	FleetDrive Nissan	Unlikely	Moderate	Moderate		£ -	£ -		£ -	
005	Technical			Network issues/data gathered during the trials, indicate that installation on anything other than laboratory or small scale testing require major alterations to existing networks.	FleetDrive Nissan EA Technology	Possible	Severe	High	Initial tests and domain knowledge give no indication that this will be an issue but planned Esprit trial will determine viability in the context of wider network applicability beyond the already undertaken laboratory testing.	£ -	Ongoing	EA Technology	Unlikely	Severe	Moderate		£ 25,000.00	£ 6,250.00	£ 6,250.00	£ -	
006	Business (Contractor/Supplier)		31/05/2013	Lack of buy-in from project partners.	EA Technology	Possible	Moderate	Moderate	Unlikely as letters of support already received and companies already investing staff time in the project. Shared risks and benefits/profits agreed where applicable and long term benefits identified for all parties.	£ -	Yes	EA Technology	Unlikely	Moderate	Moderate		£ 10,000.00	£ 2,500.00		£ 2,500.00	
007	Business (All)		31/12/2015	Availability or loss of key resources.	All parties	Possible	Moderate	Moderate	Consider succession strategies, identify and ensure suitable knowledge transfer and training to potential replacements.	£ -	Ongoing	All parties	Unlikely	Low	Low		£ 20,000.00	£ 5,000.00		£ 5,000.00	
008	General Public			Failure to identify/engage suitable clusters (10 EV drivers per feeder) potentially leading to delays in trial instigation, reduction in cluster sizes (and hence useful data). Net impact of reduction in confidence of results.	EA Technology	Probable	Moderate	Moderate	Identify as many potential sites as possible to maximise chances of sufficient cluster sizes and begin liaison with community groups and local councils to gain their support.	£ -	Ongoing	EA Technology	Probable	Moderate	Moderate		£ 25,000.00	£ 18,750.00	£ 18,750.00	£ -	
009	Business (Internal)			Failure of project to adequately cover lease hire costs so customer uptake insufficient preventing reasonable data gathering from trial.	EA Technology	Probable	Moderate	Moderate	Negotiated significant reduction in normal rates for lease of Nissan Leaf EV.	£ -	Yes	EA Technology	Possible	Moderate	Moderate		£ -	£ -		£ -	
010	Business (Contractor/Supplier)		12/03/2014	EV Supplier does not engage with project resulting in inability to test proposed system with EV vehicles.	EA Technology	Possible	Severe	High	- Nissan has already provided a letter of support for the project so risk unlikely to occur. - Nissan signed MoU. - Risk to be revisited in the event sub-contract is not signed by Nissan.	£ -	Ongoing	EA Technology	Unlikely	Severe	Moderate		£ 36,000.00	£ 9,000.00		£ 9,000.00	
011	Business (Contractor/Supplier)		30/08/2014	EV Supplier fails to deliver EVs and associated chargers to test site locations resulting in delays to the trials and loss of credibility with trial participants.	EA Technology	Possible	Moderate	Moderate	Strong working relationship being developed with Nissan and FleetDrive to ensure smooth delivery.	£ -	Ongoing	EA Technology	Possible	Moderate	Moderate		£ 55,000.00	£ 27,500.00		£ 27,500.00	
012	Technical			PLC cannot be fitted in substations or communication medium fails.	EA Technology ANDT	Unlikely	Moderate	Moderate	Esprit system is capable of using other communication methods (such as GSM) if necessary.	£ -	No	EA Technology	Unlikely	Low	Low		£ 30,000.00	£ 7,500.00	£ 7,500.00	£ -	
013	Technical		30/08/2014	Temporary charging point installations cannot be fitted in homes.	EA Technology Nissan ZCF	Possible	Moderate	Moderate	No mitigation possible. Dependant on houses to be involved in the trial. Note Sep-2013: Cost reduced due to current status of house surveys.	£ -	No	ZCF	Possible	Moderate	Moderate		£ 35,000.00	£ 17,500.00		£ 17,500.00	
014	Technical			Controlling of chargers is not possible or switching off all chargers is required to meet thermal limits of a feeder.	EA Technology	Possible	Moderate	Moderate	Undertaking desktop studies to determine effectiveness of the controlling of chargers. Indications are that phasing charging will provide significant head-room for feeders.	£ -	Yes	EA Technology	Unlikely	Moderate	Moderate		£ 2,000.00	£ 500.00	£ 500.00	£ -	
015	Technical		12/03/2014	Esprit purchase and installation costs is more expensive than planned at bid stage.	EA Technology	Probable	Moderate	Moderate	Discussions undertaken with all parties on-board in order to allow utilisation of costs that are as accurate as possible.	£ -	Yes	EA Technology	Unlikely	Moderate	Moderate		£ 50,000.00	£ 12,500.00		£ 12,500.00	
016	Technical			Results from other related projects (EV) having less positive results than anticipated.	All parties	Possible	High	Moderate	Ensure a good working knowledge of the national picture and similar projects. Once Esprit trial is underway expectations of results and changes to result in more appropriate testing can be undertaken.	£ -	Ongoing	All parties	Possible	Moderate	Moderate		£ 10,000.00	£ 5,000.00	£ 5,000.00	£ -	
017	Technical			Other forms of transport becoming increasingly attractive, reduced rail fares, lower petrol costs etc.	All parties	Possible	High	Moderate	No mitigation possible. Changes to current transport policies unlikely. Prices of fuel and public travel costs unlikely to reduce.	£ -	No	All parties	Unlikely	High	Moderate		£ -	£ -		£ -	
018	Technical			Impact of external factors economic, regulatory, environmental, i.e. EV uptake is slow and not enough are available to trial.	EA Technology	Possible	Moderate	Moderate	Nissan already agreed to work as part of the trial team.	£ -	Yes	EA Technology	Unlikely	Moderate	Moderate		£ -	£ -		£ -	
019	Technical		31/12/2015	Technology only works with Nissan EVs & associated charging methodology.	EA Technology	Possible	Severe	High	Engage with other EV manufacturers to ensure that the Technology will be compatible with their current and planned products.	£ 40,000.00	No	EA Technology	Unlikely	Severe	Moderate		£ 20,000.00	£ 5,000.00		£ 5,000.00	
020	Business (Contractor/Supplier)			No access to network/utilisation data due to resource shortages within the DNOs participating in the trials.	All parties	Probable	High	High	Ensure regular updates meetings/teleconferences held between all parties to discuss adherence to the project plan and ensure resources are planned to be available when required. Resourcing concerns to be raised as soon as practicable and evaluated for impact to the project plan.	£ -	Ongoing	All parties	Possible	Moderate	Moderate		£ 100,000.00	£ 50,000.00	£ 50,000.00	£ -	
021	Business (Internal)		31/12/2015	EATL unable to provide sufficient resources in the timescales necessary to deliver the project.	EA Technology	Possible	High	Moderate	Active recruitment of additional staff is currently underway. Planning of the project to allow for anticipated resource availability as far as is reasonably practicable. Update Sep-2013: Significant number of staff within EA Technology highly involved in delivering the project.	£ -	Yes	EA Technology	Unlikely	Moderate	Moderate		£ 50,000.00	£ 12,500.00		£ 12,500.00	
022	Business (Internal)		31/12/2015	EATL spend more time project managing due to the risks detailed occurring. Note Sep-2013: Greater levels of reporting required than had been anticipated at bid stage. (Increased likelihood to Probable).	EA Technology	Probable	Moderate	Moderate	Ensure regular updates meetings/teleconferences held between all parties to discuss adherence to the project plan and identify risks and blockers to progress of the project.	£ -	Ongoing	EA Technology	Almost Certain	Moderate	High		£ 50,000.00	£ 45,000.00		£ 45,000.00	
023	Unallocated		31/12/2015	Due to the nature of the project (research trials into new, experimental technology) it is reasonable to assume that risks that have not been specifically foreseen will occur. This line allows for the impact of currently unforeseen risks.	All parties	Almost Certain	High	Severe	Ensure regular updates meetings/teleconferences held between all parties to discuss adherence to the project plan and identify risks and blockers to progress of the project.	£ -	Ongoing	All parties	Almost Certain	Moderate	High		£ 100,000.00	£ 90,000.00		£ 90,000.00	
024	General Public		12/03/2014	Customer Recruitment Reaching the target of 7 clusters of 10 participants within the 12 month period outlined in the project direction.	EA Technology	Probable	Severe	Severe	Develop mitigation plan, specifically focussing on this risk. "Cluster Participation Mitigation Plan." - Significant interest received by the project since approval of the customer engagement plan and creation of the website.	£ 2,000.00	Ongoing	EA Technology	Unlikely	Severe	Moderate		£ -	£ -		£ -	
025	General Public		12/03/2014	Volunteers for project participation fail credit checks and prevent sufficient clusters from being established.	EA Technology Fleetdrive Electric	Unlikely	Moderate	Moderate	Discuss with Fleetdrive Electric the specifics of the vehicle ownership model and gain clarity on exactly how they expect the rental agreement model to operate.	£ -	Yes	Fleetdrive Electric	Possible	Moderate	Moderate		£ 30,000.00	£ 15,000.00		£ 15,000.00	
026	Business (All)		31/12/2015	Insufficient funding available in budget.	EA Technology	Probable	High	High	- Re-forecast task expenditure by category for resubmission of Project Direction criteria. - Analysis and planning of individual tasks to determine necessary budgets. - Fixed price contracts from some suppliers have been quoted at lower than the amount forecast in budget. Note Sep-2013: Likelihood increased from possible to probable due to number of people involved in meeting SDRC requirements relating to cluster recruitment.	£ -	Ongoing	EA Technology	Probable	High	High		£ 100,000.00	£ 75,000.00		£ 75,000.00	

Risk Identification	Risk Category	Risk Details			Affected Parties	Pre-Mitigation			Post-Mitigation			Contingency Action in Event Risk is Realised												
		Date Risk Raised	Target date for addressing risk	Risk Details		Likelihood	Severity	Overall Risk	Mitigation Measure	Cost of Mitigation	Mitigation Applied	Responsible for Risk Mitigation	Likelihood	Severity	Overall Risk	Contingency Action in Event Risk is Realised	Risk Closed	Date of Risk Closure or Supersession	Cost Impact	Contingency Required	Contingency Released	Contingency Retired	Contingency Remaining	Contingency Avert
027	Business (All)		31/12/2015	Interest rate risk arising from the interest expectations made by Ofgem.	SSEPD	Almost Certain	High	Severe	- SSEPD to discuss with Ofgem, ENA and other DNOs the implications and potential mitigation measures for this and all other Tier 2 bids. - Effective management of resources and risks.	£ -	Ongoing	SSEPD	Almost Certain	Moderate	High	No		£ -	£ -			£ -		
028	Business (Client)			Failure to meet SDRCs results in loss of compulsory funding contribution.	EA Technology	Possible	High	Moderate	- Interim 'Phase 1' contract. - Careful focus of funding to maximise benefits to customer recruitment.	£ -	Ongoing	EA Technology	Possible	Moderate	Moderate	Yes	12/09/2013	£ -	£ -			£ -		
029	Business (All)			Restriction on available funding until specific project partners have signed contracts prevents full focus being applied to customer engagement and fully establishing the project. Risk exacerbated by the time anticipated to create the Novel Commercial Arrangement and generate the associated documentation.	EA Technology	Almost Certain	High	Severe		£ -	Yes	EA Technology	Almost Certain	Low	Moderate	Yes	12/09/2013	£ -	£ -			£ -		
030	Technical		31/12/2015	Security risk from data transmission. - Data / control signals can be intercepted. - Data can be blocked from receipt.	EA Technology ANDTr	Possible	Moderate	Moderate	Penetration tests to be undertaken.	£ 10,000.00	Ongoing	EA Technology	Unlikely	Moderate	Moderate	No		£ 15,000.00	£ 3,750.00			£ 3,750.00		
031	Technical			Interference with other company communications over the cables? - Network over powerline; - Child monitors etc. - Regulatory licence problems (risk of preventing competitors undertaking similar trials).	EA Technology	Unlikely	Moderate	Moderate	Alternative communication methods to be considered such as GSM/GPRS.	£ 9,000.00	No	EA Technology	Unlikely	Low	Low	Yes	12/09/2013	£ 5,000.00	£ 1,250.00		£ 1,250.00	£ -		
032	Business (Client)			Increased risk of theft/vandalism of substations due to increased equipment value.	EA Technology SSEPD EA Technology Northern Powergrid	Possible	Moderate	Moderate		£ -	No	EA Technology	Unlikely	Moderate	Moderate	Yes	12/09/2013	£ -	£ -			£ -		
033	Business (Client)			Management of customer expectations; general public do not appreciate that they may not be eligible for cluster establishment.	EA Technology SSEPD EA Technology Northern Powergrid	Unlikely	High	Moderate	Unlikely to occur as the relative value increase of equipment within substations will be low.	£ -	No	SSEPD Northern Powergrid	Unlikely	High	Moderate	Yes	12/09/2013	£ -	£ -			£ -		
034	General Public		12/03/2014	Sep-2013: Significantly greater interest has been received by the project than had been anticipated at bid stage, requiring greater effort for all levels of customer engagement (communications/network diagrams/etc).	EA Technology Automotive Comms Fleetdrive Electric Zero Carbon Futures	Probable	High	High	- Criteria/transparent process for selecting applicants. - Ability to participate in social trials. - Runner-up prizes. - Sep-2013: Greater resource utilisation for all levels of customer engagement, including database sharing between EA Technology, Fleetdrive Electric and Zero Carbon Futures to minimise cost impacts and maximise data transfers.	£ 20,000.00	Ongoing	Fleetdrive Electric Zero Carbon Futures	Possible	Moderate	Moderate	No		£ 2,000.00	£ 1,000.00			£ 1,000.00		
035	Business (Client)		12/03/2014	Project Timeline. Critical tasks and deliverables not achieved in line with Project Plan.	EA Technology	Probable	High	High	- Highlight critical tasks / deliverables and review process timescales. - Provide a schedule of anticipated document delivery in order to plan suitable resource availability. - As much notice as possible will be provided regarding individual documents, with requirements for authorisation and impact of these dates being missed. - Rolling schedule will be provided for near future months.	£ -	Ongoing	EA Technology	Possible	High	Moderate	No		£ -	£ -			£ -		
036	Business (All)		31/12/2015	Possibility that SSEPD Steering Group members do not understand all details of Project Specific risks due to lack of direct, day-to-day involvement in the project.	EA Technology	Possible	High	Moderate	EATL staff (Dave A Roberts) to attend Steering Group meetings and maintain regular contact with SSEPD counterparts to minimise the impact of any mis-communications.	£ 18,000.00	Ongoing	EA Technology	Possible	Moderate	Moderate	No		£ -	£ -			£ -		
037	General Public		12/03/2014	Exit strategy for managing participants who need to leave the project. - Loss of job. - Move house.	EA Technology Fleetdrive Electric	Possible	High	Moderate	- One charge point per participation per property (if one property leases two cars then two charge points can be provided). - If move house, lose the car and this will be 'returned' to project pool unless moving to another established or forming cluster. - Project Direction / SDRCs require establishment of clusters to have 10 participants, not required to maintain 10 per cluster for the full project. - Consider specifics of individual feeder clusters to ensure each feeder does not fall below minimum threshold for useful data to be gathered from the project.	£ -	No	EA Technology Fleetdrive Electric	Possible	Low	Moderate	No		£ -	£ -			£ -		
038	Technical			Access to, and quality of GIS and network data or significant effort required to identify and gather the required information.	EA Technology SSEPD Northern Powergrid	Probable	High	High	All available information can be provided from SSEPD and Northern Powergrid data. Drawings cannot be fully relied upon without site surveys to verify details and phasing information is not available.	£ 10,000.00	Ongoing	SSEPD Northern Powergrid	Probable	Moderate	Moderate	Yes	01/05/2013	£ -	£ -			£ -		
039	Technical		31/12/2015	Lack of pre-Esprit installation data for pre-trial comparisons.	EA Technology SSEPD Northern Powergrid ANDTr	Probable	Moderate	Moderate	Plan to install Esprit control unit in substation prior to delivery of EVs to participants. This will provide data on base-load of feeders. Sep-2013: Test schedules and approval processes for both SSEPD and NPG.	£ -	No	EA Technology SSEPD Northern Powergrid	Unlikely	Moderate	Moderate	No		£ -	£ -			£ -		
040	General Public			Loss of fully engaged participants from established clusters while additional customers are being recruited to complete the total requirement for 100 participants and secure funding. There is a high risk that clusters will be signed-up to participate in line with the SDRC criteria (and Project Direction requirements) but if funding is not released for a significant period of time the cluster members will not participate when required, due to the time-lapse between sign up and checks / surveys leading to cluster implementation (i.e. charging point installation and EV delivery). A secondary element of risk relates to current 'near' clusters that may not achieve the full number of participants required per low voltage feeder to class as additional clusters of at least 10 participants. Delaying implementation of such clusters however creates the risk that no potential participants, currently willing to participate, are open to forming a smaller cluster at a later date. Clusters in this situation would still be valuable to form part of the required 100 participants signed-up. Potential impacts from the above risks include: - Not meeting SDRCs as currently willing cluster participants become reluctant to participate due to delays.	EA Technology	Probable	High	High	- Work to deliver sufficient clusters to Ofgem for funding requests sufficiently early to enable funding release. - Maintain customer engagement throughout process to reduce chance of customers leaving. - Gain clarity from Ofgem as to the necessary requirements to gain release of funding under the Project Direction v1.10, Chapter 8, paragraphs (vi) and/or (ix). - Sep-2013: Maintaining regular (2 per month) meetings with Ofgem to provide frequent, detailed updates on cluster establishment process and the timescales for cluster approval.	£ 50,000.00	Ongoing	EA Technology	Possible	Severe	High	Seven clusters of at least ten were submitted to Ofgem by 13 November 2013, four months ahead of schedule. In order to mitigate against further attrition and to endeavour to replace customers where possible, the project team is: - Working with cluster champions in Chiswick, Marlow and South Gosforth to backfill the one customer drop out in each of these clusters - Chiswick – no additional customer available - Marlow – cluster champion generating further interest - South Gosforth – cluster champion re-leafletting the LV feeder area - Securing customer-signed lease agreements from all customers within the first seven submitted clusters to mitigate against further attrition - The return rate of lease agreements is detailed in Table 2, representing a 96% return rate to date - Authorising delivery (at EA Technology's financial risk), pre-Christmas, of the first ten most urgent EVs, to those customers who are in most need of cars – to mitigate the risk of losing further customers - Managing customer expectations on car delivery and trial set up through communications tailored to each of the submitted seven clusters (example letter in Appendix B)	No		£ 1,000,050.00	£ 500,025.00		£ -	£ 500,025.00	
041	Technical		31/12/2015	Esprit fails and causes low voltage events or power failures.	EA Technology	Possible	High	Moderate	- First choice feeders will be limited to feeders that are believed to be able to handle 10 EVs without Esprit. - Second choice would involve phased implementation to allow monitoring of limits in parallel with frequent discussion with Ofgem to push for reduced participation requirements for feeder cluster. Aug-2013: Esprit units will be set-up to 'fail-on' so in the event of communication failure customer vehicles will not be prevented from charging.	£ -	Ongoing	EA Technology	Possible	Moderate	Moderate	No		£ -	£ -			£ -		
042	Business (Contractor/Supplier)		31/12/2015	Trial partners / suppliers miss an appointment slot with trial participants.	EA Technology SSEPD	Possible	High	Moderate	SSEPD to provide specifics of the requirements that must be adhered to by all partners and suppliers for inclusion in the contracts. (Require this information from NPG as well for inclusion in contracts in preparation for undertaking working in parallel.)	£ -	Ongoing	Fleetdrive Electric Zero Carbon Futures	Unlikely	High	Moderate	No		£ 2,000.00	£ 500.00			£ 500.00		
043	Technical		31/12/2015	Excess callouts by participants due to 'failures.'	EA Technology	Possible	High	Moderate	Investigate building checks into the process, (status lights at each stage).	£ 1,000.00	Ongoing	EA Technology	Possible	Moderate	Moderate	No		£ 20,000.00	£ 10,000.00			£ 10,000.00		
044	General Public		31/12/2015	PLC causes perceived health issues.	EA Technology	Possible	Moderate	Moderate	Ensure pre-prepared, rational, consistent message ready for dissemination either via letter, phone or in person.	£ 1,000.00	No	EA Technology	Possible	Moderate	Moderate	No		£ -	£ -			£ -		
045	Technical		30/08/2014	Cross polarity issues.	EA Technology	Possible	Moderate	Moderate	Cross polarity issues will only be an issue in the event that installation or subsequent work under previous, non-PEV related tasks has been incorrectly carried out. To mitigate against this possibility within the project, work in the PEV project to be undertaken by suitably competent contractors.	£ -	Ongoing	EA Technology	Unlikely	Low	Low	No		£ 5,000.00	£ 1,250.00			£ 1,250.00		
046	Technical		30/08/2014	Rise of earth potential.	EA Technology	Unlikely	Moderate	Moderate	Unlikely to occur as a result of charging point installation if electrical system in property and surrounding area is correct and in a good state of repair. To mitigate against this possibility, work in the PEV project to be undertaken by suitably competent contractors.	£ -	Ongoing	EA Technology	Unlikely	Low	Low	No		£ 5,000.00	£ 1,250.00			£ 1,250.00		

Risk Identification	Risk Category	Risk Details		Affected Parties	Pre-Mitigation			Post-Mitigation						Contingency Action in Event Risk is Realised	Risk Closed	Date of Risk Closure or Supersession	Cost Impact	Contingency Required	Contingency Released	Contingency Retired	Contingency Remaining	Contingency Alert			
		Date Risk Raised	Target date for addressing risk		Likelihood	Severity	Overall Risk	Mitigation Measure	Cost of Mitigation	Mitigation Applied	Responsible for Risk Mitigation	Likelihood	Severity										Overall Risk		
047	Technical		31/12/2015	Long term safety of operation, e.g. overheating.	EA Technology	Unlikely	Low	Low	- The Esprit 'system' will be enclosed in a sealed, hardened plastic case to prevent any equipment failures causing damage to surrounding infrastructure. - The equipment specification will ensure suitable safety measures to disable equipment if deemed necessary. - A heat sensitive observation strip will be located on the outside of the unit to alert the trial participant that a significant overheating event has occurred. The participant will be informed that in such an event, they should stop use of the charging point and immediately call the project help line number and a representative will be despatched to investigate. Sep-2013: Developing a clear schedule of live network testing during a trial.	£ 500.00	No	EA Technology	Unlikely	Low	Low										
048	Technical		31/12/2015	External factors prevent operation of Esprit, e.g. Lightning Strike. - Esprit fails and prevents charging. - Esprit fails and prevents control unit from stopping charging potentially allowing an overload of the network.	EA Technology	Possible	Moderate	Moderate	Aug-2013: Esprit units will be set-up to 'fail-on' so in the event of communication failure customer vehicles will not be prevented from charging. - Sep-2013: In the event of a lightning strike or similarly disruptive event, all charge points should default to 'on' allowing charging to occur but damage resulting from the 'event' cannot be predicted at this stage.	£ -	No	EA Technology	Possible	Low	Moderate			£ 10,000.00	£ 5,000.00				£ 5,000.00		
049	Technical		31/12/2015	Operational changes affect operation of Esprit. - Closure of NOP causes controller interference.	EA Technology	Unlikely	Low	Low	- Rearrangement of local networks should not occur without respective design teams accounting for the project equipment. Sep-2013: Developing a clear schedule of live network testing during a trial.	£ -	No	EA Technology SSEPD Northern Powergrid	Unlikely	Low	Low										
050	Business (Client)		12/03/2014	Additional costs, reputational impact for SSEPD etc from majority of currently identified clusters being located in North-East.	EA Technology	Probable	High	High	Focus on SEPD areas first in order to maximise potential for clusters to be established in their areas. Note: Whilst still a possibility, significant levels of interest now received from SSEPD areas. Sep-2013: Levels of interest in the NE are increasing rapidly (at greater speed) than in southern areas.	£ -	No	EA Technology	Probable	High	High										
051	Technical		30/08/2014	Dimensions of boxes causes problems due to lack of available space in substations. Equipment disruptively fails in substations.	EA Technology	Possible	High	Moderate	External rating for mounting units outside the substations. Provide clear instructions for maintenance crews (laminated guide in substations). - Possibly override system if loading is light (e.g. in summer) - Installation of a spare charge on another feeder	£ 20,000.00	No	EA Technology	Possible	Low	Moderate										
052	Technical		31/12/2015	Equipment fails on customer premises.	EA Technology	Possible	High	Moderate	Esprit equipment now designed to 'fail on' although in the unlikely event of it 'failing off' alternative arrangements will be available to vehicle delivery. Ensure installation contractor utilised has sufficient training/clearance for substation access (either through tender process or DNO internal teams). Asset Management plan to be created. Used to log and record delivery/locations of charging points and technology. Recalls conducted more efficiently and quickly with this information.	£ 1,000.00	No	EA Technology	Remote	High	Low			£ 15,000.00	£ 1,500.00					£ 1,500.00	
053	Technical		31/12/2015	Level of access to substations; necessary staff have sufficient access to substations in the relevant network areas.	EA Technology	Possible	High	Moderate	Use of alternative communication methods will be possible if required.	£ -	No	EA Technology	Possible	Moderate	Moderate			£ 30,000.00	£ 15,000.00				£ 15,000.00		
054	Technical		30/08/2014	Recalls of equipment.	EA Technology	Possible	High	Moderate	Use of alternative communication methods will be possible if required.	£ 1,000.00	No	EA Technology	Possible	Moderate	Moderate										
055	Technical		31/12/2015	Interference with communications on cables - neighbours or other parties disrupting charging of EV	EA Technology (Dev) ANDtr	Possible	High	Moderate	Use of alternative communication methods will be possible if required.	£ -	No	EA Technology	Possible	Low	Moderate		Yes	12/09/2013	£ 10,000.00	£ 5,000.00		£ 5,000.00			
056	Business (Contractor/Supplier)		12/03/2014	Nissan Leaf reduced market price - less interest in 'preferential' hire costs with trial.	None	Unlikely	Moderate	Moderate	Not deemed necessary to undertake additional mitigation as the lease rate to be extremely tempting deal. Sep-2013: At time of writing the social trial rental rate is better than the market rate by between £1500 - £2000 per the duration of the lease and is unavailable.	£ -	No	None	Unlikely	Moderate	Moderate		Yes	12/09/2013	£ -	£ -					
057	Business (Contractor/Supplier)			Lengthy DOA with Nissan causes delay to recruitment for social trials	EA Technology	Possible	High	Moderate	Consider implementation of data loggers to be installed on the vehicles in the event data is unavailable.	£ -	Ongoing	EA Technology	Possible	High	Moderate		Yes	01/06/2013	£ -	£ -					
058	Business (Contractor/Supplier)			Release of new Nissan Leaf model in Summer 2013 could cause lack of interest in the trials which will be using an older model of Nissan Leaf.	EA Technology	Remote	None	Low	Risk no longer applicable as new Leaf (MK2) has been released and is now to be utilised by the Project.	£ -	Yes	EA Technology	Remote	None	Low		Yes	01/06/2013	£ -	£ -					
059	Business (Contractor/Supplier)			Release of new Nissan Leaf model in Summer 2013 could cause potential stock problems for Nissan.	EA Technology & Nissan	Almost Certain	High	Severe	Negotiations nearly complete with Nissan to provide Leaf MK2 at the same monthly rate as intended for the MK1. Risk can be closed completely once sub-contract is signed between EA Technology and Nissan.	£ -	Yes	Nissan	Possible	Moderate	Moderate		Yes	12/09/2013	£ -	£ -					
060	General Public			Risk merged with Risk 040 and closed.	EA Technology	Probable	High	High	Risk merged with Risk 040 and closed.	£ -	No	EA Technology	Probable	High	High		Yes	01/06/2013	£ -	£ -					
061	Technical		30/08/2014	Estimated that 50% of domestic installs are complex requiring additional effort and cost to complete the installation. - Estimated that 50% of business cluster installs are complex requiring additional effort and cost to complete the installation.	EA Technology Fleetdrive Electric Zero Carbon Futures	Almost Certain	Moderate	High	Management of forming clusters, prioritising those that are anticipated to be lower difficulty relating to installation if sufficient quantities of clusters are available.	£ -	No	Zero Carbon Futures	Possible	Moderate	Moderate		No		£ 26,750.00	£ 13,375.00	£ 9,042.00			£ 4,333.00	
062	Business (Client)		31/12/2015	Lack of suitable available resources within the DNO prevent development of: - Methods of working. - Standard installation methods/designs. - Identification and exploitation of potential cluster sites. Principal contract cannot be agreed with SSEPD.	SSEPD	Almost Certain	High	Severe	Allocation of specific, named resources to provide support to the project in the specific areas required.	£ -	Ongoing	SSEPD	Possible	High	Moderate		No								
063	Business (All)		15-Jul-13	Sub-contracts cannot be agreed with all partners/suppliers.	EA Technology	Unlikely	Severe	Moderate	SSEPD and EA Technology will develop the principal contract document in unison. This will enable negotiation to take place throughout the development of the principal contract.	£ -	Yes	EA Technology	Remote	Severe	Low		Yes	30/04/2013	£ -	£ -					
064	Business (All)		15-Jul-13	The approach taken for the Novel Commercial Arrangement is not 'fit for purpose'.	EA Technology	Possible	High	Moderate	EA Technology will take a pragmatic approach when agreeing sub-contracts taking into account the specific scope of works for each partner/supplier. SSEPD and EA Technology will develop/agree the approach in partnership and ensure the approach taken is applicable for the MEA project. Regular reviews of the Novel Commercial Arrangement throughout the delivery of the project.	£ -	Yes	EA Technology	Possible	High	Moderate		Yes	27/11/2013	£ -	£ -					
065	Business (All)		15-Jul-13	Failure of Esprit equipment results in damage to the distribution network.	EA Technology	Possible	Severe	High	Testing and commissioning tests to improve confidence in the equipment's reliability will be undertaken. - Undertake network modelling of the proposed network cluster areas to ensure that the capability exists to install the Electric Vehicles without adversely affecting the network. - If modelling suggests potential problems will be encountered in the event of cluster establishment.	£ 1,500.00	Yes	EA Technology	Unlikely	Severe	Moderate		No								
066	Technical		15-Jul-13	Failure of Esprit equipment results in customer's car being unavailable for use.	EA Technology	Possible	Moderate	Moderate	Testing and commissioning tests to improve confidence in the equipment's reliability will be undertaken. - Brief customers on available actions in the event the EV is unsuitable for use due to insufficient charge.	£ 1,000.00	Yes	EA Technology	Possible	Low	Moderate		No								
067	Technical		06-Sep-13	Nissan Leaf Visia model does not provide data from the vehicle as required by the project. Requirement for data loggers to be fitted to all vehicles (technical and social trials) to provide necessary data if alternative model cannot be agreed.	EA Technology	Confirmation Requirement	Severe	Critical	Upgrade of Leaf models to Accenta rather than Visia. Nissan / MEA to cover upgrade cost on a 60% / 40% split.		No	EA Technology	Confirmation Requirement	Severe	Critical		No		£ 28,800.00	£ 28,800.00	£ 28,800.00				
068	Technical		06-Sep-13	Requirement to reconfigure the local distribution network in order to connect 10 or more trial participants to the same low voltage feeder.	EA Technology	Almost Certain	Moderate	High	Working to establish clusters across as many areas/locations as possible to cultivate maximum potential variety in cluster choices. Preferential focus will be given to developing clusters with sufficient participants already on the same feeder. - Fund at least one cluster of 7kW charging Nissan Leafs as part of the technical trials.		No	EA Technology	Almost Certain	Moderate	High		No		£ 50,000.00	£ 45,000.00				£ 45,000.00	
069	Technical		06-Sep-13	Risk that as the newly emerging market for EVs is focussing on the sale of vehicles inclusive of c7kW chargers, (e.g. Renault Zoe or Ford Focus), the use of only c3.3kW chargers will not be representative of the network impacts to be expected, nor will the results be scalable.	EA Technology	Possible	High	Moderate	Provide incentives to customers to complete the surveys, (e.g. prize draw entry).	£ 8,500.00	No	EA Technology	Possible	High	Moderate		Yes	18/09/2013	£ -	£ -					
070	General Public		12-Sep-13	Insufficient data available on EV use and charging habits as trial participants do not complete surveys in sufficient quantities or in suitable timescales. Result will be that stated recommendations may later prove to be invalid.	EA Technology	Probable	High	High		£ 300.00	No	EA Technology	Probable	High	High		No								

Risk Identification	Risk Category	Risk Details		Affected Parties	Pre-Mitigation			Post-Mitigation					Contingency Action in Event Risk is Realised	Risk Closed	Date of Risk Closure or Supersedeance	Cost Impact	Contingency Required	Contingency Released	Contingency Retired	Contingency Remaining	Contingency Alert		
		Date Risk Raised	Target date for addressing risk		Risk Details	Likelihood	Severity	Overall Risk	Mitigation Measure	Cost of Mitigation	Mitigation Applied	Responsible for Risk Mitigation										Likelihood	Severity
073	Business (All)	12-Sep-13	10/01/2014	Request to Project Direction (update from v1.10) is rejected by Ofgem, preventing movement of funds between Ofgem Categories. Severely impacted tasks if rejected are Customer Engagement and Cluster Establishment (including funding of vehicles and purchase of equipment).	EA Technology	Almost Certain	High	Severe	- Ensure clarity of rationale behind update request is clear within the document; - Ensure document is reviewed by SSE Regulation Team; - Open dialogue with Ofgem to resolve issue; - Continue responding to Ofgem's requests for clarification and offer meetings / teleconferences to resolve concerns they may have.	£ 12,500.00	Yes	EA Technology	Unlikely	High	Moderate	- Clarify the specific elements of sub-contractor invoicing to ensure maximum alignment with Ofgem cost categories. (For example ZCF contract to cover purchase and installation of charging to be allocated against Equipment rather than Contractors). - Utilisation of Project Contingency.	No		£ 535,000.00	£ 133,750.00		£ 133,750.00	
074	Business (All)	12-Sep-13	10/01/2014	Change Request to update Project Direction (from v1.10) is rejected by Ofgem, preventing movement of funds between Categories and Project Tasks. Severely impacted Categories if rejected are Labour, Decommissioning and Contingency, severely impacted Tasks are Customer Engagement and Cluster Establishment (including funding of vehicles and purchase of equipment).	EA Technology	Probable	Severe	Severe	- Ensure clarity of rationale behind update request is clear within the document; - Ensure document is reviewed by SSE Regulation Team; - Open dialogue with Ofgem to resolve issue.	£ 12,500.00	Yes	EA Technology	Probable	Severe	Severe	- Clarify the specific elements of sub-contractor invoicing to ensure maximum alignment with Project Tasks outlined at bid stage. (For example ZCF contract to cover purchase and installation of charging to be allocated against Installation of Equipment rather than Establishment of Clusters). - Utilisation of Project Contingency.	No		£ 1,409,533.00	£ 1,057,149.75		£ 1,057,149.75	
075	Business (All)	04-Oct-13	10/01/2014	Change Request to update Project Direction (from v1.10) is delayed by Ofgem, preventing movement of funds between Categories and Project Tasks in the short term. In order to continue the project without the agreement of a revised Project Direction, release of project contingency is required. Release of project contingency will enable continuation of the project until end of November 2013. The project will be in breach of Project Governance if Ofgem spending category limits are exceeded by more than 10% without prior authorisation.	EA Technology	Almost Certain	High	Severe	- Utilise Project Contingency to bolster tasks running short on funds until Project Direction update request is approved. - Use of contingency requires approval of the Project Steering Group.	£ 3,000.00	Ongoing	EA Technology	Possible	High	Moderate	- Requirement for release of contingency, calculated at an approximate rate of £50k per month to cover October & November for customer engagement and cluster establishment. - Once update request to PD is approved, any used contingency will be returned by transferring funds from the appropriate task.	No		£ 155,000.00	£ 77,500.00	£ 155,000.00	-£ 77,500.00	
076	General Public	04-Oct-13	30/08/2014	Unable to secure recruitment of 100 participants in the social trial.	EA Technology	Possible	High	Moderate	- Utilising databases of existing users (held by ZCF and Fleetdrive Electric) where possible. - Publication of the social trials through the website, social media and publications. - Use of Nissan staff.	£ -	Ongoing	EA Technology	Possible	High	Moderate	- Further discount vehicles to encourage sign-up.	No		£ 60,000.00	£ 30,000.00		£ 30,000.00	
077	Business (All)	27-Nov-13	03/01/2014	Risk relating to the technical trial clusters submitted to Ofgem. Since the submission of the seven clusters of 10, attrition in three of these clusters has fallen and these clusters are now clusters of 9.	EA Technology Fleetdrive Electric Zero Carbon Futures	Probable	High	High	Fleetdrive Electric and Zero carbon Futures have been asked to backfill if at all possible to boost the clusters back to 10.		Ongoing	Fleetdrive Electric Zero Carbon Futures	Probable	High	High		No		£ -			£ -	
078	Business (All)	27-Nov-13	10/01/2014	Since the submission of reports to Ofgem in November there has been discussion on what level of contracts constitute commitment to the project. There is a risk that the Project may be requested to recruit further clusters to replace those already recruited, who have fallen to clusters of 9.	All Project Partners	Possible	High	Moderate	Lease Agreements have been signed and are being collected by Fleetdrive Electric for each of the submitted clusters. These may be used as alternative evidence to satisfy SSE/Ofgem should it be required. EA Technology discussing validity of Declaration of Intent with SSE to prove that clusters were submitted as 10 to Ofgem in line with the SDRC.		Ongoing	EA Technology, SSE	Possible	High	Moderate		No		£ -			£ -	
079	Business (Client)	27-Nov-13	10/01/2014	Ofgem determine that natural attrition of clusters, post submission of cluster status is not acceptable within their interpretation of the Project Direction and EATL is liable for all disallowed expenditure.	EA Technology	Possible	Severe	High	Request clarification from Ofgem as to interpretation and, if possible, acknowledgement that the submitted clusters already meet the necessary requirements outlined in the PD. The currently established clusters, despite the attrition experienced to date are still considered to contain sufficient trial participants to generate the learning intended at project bid submission. Information to this effect, including support from the Ricardo, the project's Independent Evaluator has been submitted to Ofgem on 13th December 2013.		Yes	Project Management Team	Probable	Severe	Severe		Yes	23/12/2013	£ 3,207,790.00	£ 2,405,842.50	£ 2,405,842.50	£ -	

Appendix B. Project Bank Account Statement

The project bank account statement contained within this appendix covers the date range from 7th June 2013 to 9th December 2013.

Statement for account **_*_*_**_** from 01/06/2013 to 09/12/2013

Short name:	SOUTHERN ELECTRIC PO	Currency:	GBP
Alias:	SOUTHERN ELECTRIC PO	Account type:	SPECIAL INT BEARING
BIC:	NWBKGB2L	Bank name:	NATIONAL WESTMINSTER BANK
IBAN:	GB*****	Bank branch:	READING MKT PLACE

Date	Narrative	Type	Debit	Credit	Ledger balance
	CLOSING BALANCE				2,155,504.27Cr
28/11/2013	NORTHERN ELECTRIC LCNF	BAC		27,000.00	2,155,504.27Cr
28/11/2013	NORTHERN ELECTRIC LCNF	BAC		18,833.33	2,128,504.27Cr
28/11/2013	DNO CONTRIBUTION ***** EA TECHNOLOGY LIMITED, CAPENHURST CHAPS TFR	CHP		9,894.58	2,109,670.94Cr
28/11/2013	R B S-SP MANWEB	BAC		17,750.00	2,099,776.36Cr
27/11/2013	SOUTHERN ELECTRIC I2EV COSTS	EBP	100,415.78		2,082,026.36Cr
27/11/2013	SCOTTISH HYDRO-E I2EV FUNDING	EBP		8,916.67	2,182,442.14Cr
27/11/2013	SOUTHERN ELECTRIC I2EV FUNDING	EBP		128,416.67	2,173,525.47Cr
27/11/2013	SOUTHERN ELECTRIC I2EV FUNDING	EBP		29,683.93	2,045,108.80Cr
26/11/2013	WESTPOWSWEST LCNF 2013-14 FROM FP 26/11/13 1700 *****	BAC		62,916.67	2,015,424.87Cr
20/11/2013	UK PN OPERATIONS *****	BAC		26,833.33	1,952,508.20Cr
20/11/2013	UK PN OPERATIONS *****	BAC		57,250.00	1,925,674.87Cr
05/11/2013	DNO CONTRIBUTION ***** EA TECHNOLOGY LIMITED CHAPS TFR	CHP		9,894.58	1,868,424.87Cr
01/11/2013	SOUTHERN ELECTRIC I2EV COSTS	EBP	134,225.51		1,858,530.29Cr
28/10/2013	NORTHERN ELECTRIC LCNF	BAC		27,000.00	1,992,755.80Cr
28/10/2013	NORTHERN ELECTRIC LCNF	BAC		18,833.33	1,965,755.80Cr
28/10/2013	SCOTTISH HYDRO-E IEV FUNDING	EBP		8,916.67	1,946,922.47Cr
28/10/2013	SOUTHERN ELECTRIC IEV FUNDING	EBP		29,683.93	1,938,005.80Cr
28/10/2013	SOUTHERN ELECTRIC IEV FUNDING	EBP		128,416.67	1,908,321.87Cr
28/10/2013	WESTPOWSWEST LCNF 2013-14 FROM FP 28/10/13 0209 *****	BAC		62,916.67	1,779,905.20Cr
28/10/2013	R B S-SP MANWEB	BAC		17,750.00	1,716,988.53Cr
25/10/2013	UK PN OPERATIONS *****	BAC		26,833.33	1,699,238.53Cr
	BALANCE BROUGHT FORWARD				1,672,405.20Cr

NB: Transactions with today's date may still be subject to confirmation and may subsequently be reversed from your account.

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Statement for account **_*_*_* ***** from 01/06/2013 to 09/12/2013

Date	Narrative	Type	Debit	Credit	Ledger balance
	BALANCE CARRIED FORWARD				1,672,405.20Cr
25/10/2013	UK PN OPERATIONS *****	BAC		57,250.00	1,672,405.20Cr
07/10/2013	SOUTHERN ELECTRI I2EV COSTS	EBP	195,913.82		1,615,155.20Cr
30/09/2013	SOUTHERN ELECTRI I2EV FUNDING	EBP		180,329.88	1,811,069.02Cr
30/09/2013	SOUTHERN ELECTRI I2EV FUNDING	EBP		128,416.67	1,630,739.14Cr
30/09/2013	SCOTTISH HYDRO-E I2EV FUNDING	EBP		8,916.67	1,502,322.47Cr
30/09/2013	EA TECHNOLOGY LTD DNO CONTRIBUTION FP 30/09/13 1443 ***** DNO CONTRIBUTION	BAC		9,894.58	1,493,405.80Cr
30/09/2013	30SEP-GRS *****	INT		694.16	1,483,511.22Cr
27/09/2013	NORTHERN ELECTRIC LCNF	BAC		27,000.00	1,482,817.06Cr
27/09/2013	NORTHERN ELECTRIC LCNF	BAC		18,833.33	1,455,817.06Cr
26/09/2013	WESTPOWSWEST LCNF 2013-14 FROM FP 26/09/13 1700 *****	BAC		62,916.67	1,436,983.73Cr
26/09/2013	R B S-SP MANWEB	BAC		17,750.00	1,374,067.06Cr
20/09/2013	UK PN OPERATIONS *****	BAC		26,833.33	1,356,317.06Cr
20/09/2013	UK PN OPERATIONS *****	BAC		57,250.00	1,329,483.73Cr
02/09/2013	SOUTHERN ELECTRI I2EV FUNDING	EBP		128,416.67	1,272,233.73Cr
02/09/2013	SCOTTISH HYDRO-E I2EV FUNDING	EBP		8,916.67	1,143,817.06Cr
30/08/2013	DNO COMPULSORY C ***** EA TECHNOLOGY LI MITED CHAPS TFR	CHP		49,621.34	1,134,900.39Cr
28/08/2013	SOUTHERN ELECTRI I2EV COSTS	EBP	221,800.11		1,085,279.05Cr
28/08/2013	NORTHERN ELECTRIC LCNF	BAC		27,000.00	1,307,079.16Cr
28/08/2013	NORTHERN ELECTRIC LCNF	BAC		18,833.33	1,280,079.16Cr
28/08/2013	SPM ***** SP MANWEB PLC	CHP		17,750.00	1,261,245.83Cr
27/08/2013	WESTPOWSWEST LCNF 2013-14 FROM FP 27/08/13 0209 *****	BAC		62,916.67	1,243,495.83Cr
21/08/2013	UK PN OPERATIONS *****	BAC		26,833.33	1,180,579.16Cr
21/08/2013	UK PN OPERATIONS *****	BAC		57,250.00	1,153,745.83Cr
26/07/2013	UK PN OPERATIONS *****	BAC		26,833.33	1,096,495.83Cr
26/07/2013	UK PN OPERATIONS *****	BAC		57,250.00	1,069,662.50Cr
26/07/2013	NORTHERN ELECTRIC LCNF	BAC		18,833.33	1,012,412.50Cr
	BALANCE BROUGHT FORWARD				993,579.17Cr

NB: Transactions with today's date may still be subject to confirmation and may subsequently be reversed from your account.

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Statement for account **_*_*_*_* ***** from 01/06/2013 to 09/12/2013

Date	Narrative	Type	Debit	Credit	Ledger balance
	BALANCE CARRIED FORWARD				993,579.17Cr
26/07/2013	WESTPOWSWEST LCNF 2013-14 FROM FP 26/07/13 1700 *****	BAC		62,916.67	993,579.17Cr
25/07/2013	SCOTTISH HYDRO-E I2EV FUNDING	EBP		8,916.67	930,662.50Cr
25/07/2013	SOUTHERN ELECTRI I2EV FUNDING	EBP		128,416.67	921,745.83Cr
17/07/2013	R B S-SP MANWEB	BAC		17,750.00	793,329.16Cr
28/06/2013	SOUTHERN ELECTRI I2EV COSTS	EBP	122,764.24		775,579.16Cr
28/06/2013	SOUTH EASTERN POWE LOW CARB NETWORKS	BAC		26,833.33	898,343.40Cr
28/06/2013	LONDON POWER NETWO LOW CARB NETWORKS	BAC		57,250.00	871,510.07Cr
28/06/2013	NORTHERN ELECTRIC LCNF	BAC		27,000.00	814,260.07Cr
28/06/2013	NORTHERN ELECTRIC LCNF	BAC		18,833.33	787,260.07Cr
28/06/2013	28JUN-GRS *****	INT		149.90	768,426.74Cr
27/06/2013	R B S-SP MANWEB	BAC		17,750.00	768,276.84Cr
26/06/2013	NORTHERN ELECTRIC LCNF	BAC		27,000.00	750,526.84Cr
26/06/2013	SOUTHERN ELECTRI I2EV FUNDING	EBP		128,416.67	723,526.84Cr
26/06/2013	SCOTTISH HYDRO-E I2EV FUNDING	EBP		8,916.67	595,110.17Cr
26/06/2013	SCOTTISH HYDRO-E I2EV FUNDING	EBP		8,916.67	586,193.50Cr
26/06/2013	SOUTHERN ELECTRI I2EV FUNDING	EBP		128,416.67	577,276.83Cr
26/06/2013	WESTPOWSWEST LCNF 2013-14 FROM FP 26/06/13 1659 *****	BAC		62,916.67	448,860.16Cr
07/06/2013	SOUTHERN ELECTRI NTVV COSTS	EBP	125,589.42		385,943.49Cr
07/06/2013	SOUTHERN ELECTRI NTVV COSTS	EBP	46,967.13		511,532.91Cr
	OPENING BALANCE				558,500.04Cr
Totals			947,676.01	2,544,680.24	