



SAVE (Solent Achieving Value from Efficiency)

Project Progress Report

Project Number	SSET206
DNO	Southern Electric Power Distribution Ltd
Reporting Period	June 2014 – December 2014











1 Executive summary

Ofgem guidance: Executive Summary (This section should be no more than 4 pages) This section should be able to stand alone and provide a clear overview of the Project's progress and any significant issues over the last period. All stakeholders, including those not directly involved in the Project, should be able to have a clear picture of the progress. The DNO should describe the general progress of the Project and include any notable milestones or deliverables achieved in the period. The Executive Summary should also contain two subsections: one for the key risks and one for the learning outcomes.

The SAVE (Solent Achieving Value from Efficiency) project is a £10.3m project which is primarily funded by Ofgem's Low Carbon Networks (LCN) Fund and aims to establish to what extent energy efficiency measures can be considered as a cost effective, predictable and sustainable tool for managing demand on electrical networks as an alternative to traditional reinforcement.

Targeting domestic customers only, the Solent and surrounding areas have been selected as the target area for the study due to the need to obtain a full cross-section of customers from urban, suburban and rural areas which are representative of much of the UK. Organisations from across the UK are partnering with Southern Electric Power Distribution (SEPD) to manage and deliver the Project, including the University of Southampton (UoS), Wireless Maingate, Future Solent, Neighbourhood Economics (NEL) and DNV GL.

The Project will trial 4 methods: using campaigns linked to the electrical consumption of individual households; adding a financial incentive to these campaigns; deploying LED lighting; and using community energy coaches. Involving approximately 8,000 customers split across the various methods the Project is due to run until 2018, with a strong focus on sharing the findings with other network operators, customers, local authorities, Government, industry and academia throughout.

Good progress has been made in the last reporting period with key deliverables submitted within planned Project timescales and preparations made for direct customer communications which will commence in January. There have been three successful contract tenders within the period, each organisation appointed being made responsible for individual work streams which will attribute to the success of the Project, including the construction of the Network model.

SDRC 2.1 has been completed (submission to follow this report) with the construction of the initial Customer Model by University of Southampton. This assesses the behavioural aspect of the trial participants to produce a comprehensive model of usage, reflecting temporal and seasonal fluctuations, across a variety of households enabling more detailed mapping of network demand patterns. Data from the control groups and the trial area's collected prior to and during the active trials will allow this model to accurately predict the effect of the Projects interventions on a specified population.

SDRC 7.1 has also been completed (submission to follow this report) following the successful tender and appointment of EA Technology to produce the Network Model and their construction of the initial

model. The model will analyse the Projects trials from a physical perspective, collating and mapping variations in network energy use so these can be formalised into representative response on any chosen network post trial.

Both the Network and Customer models will be refined throughout the Project with final iterations forming core aspects of the Network Investment tool (SDRC7.1, 7.2 and 7.3).

Bostock Marketing Group (BMG) have been appointed as the Projects field recruitment organisation, responsible for recruiting 4,600 participants and all communications with participants throughout the Project. BMG have worked closely with University of Southampton since being appointed to finalise Project survey and contact materials, BMG staff will also be trained by Wireless Maingate to install the household monitors while on site which will reduce potential for drop-out during the installation process.

Following a successful engagement campaign with Local Authorities within the Project area, NEL have identified and selected the final four communities which will form trial and control groups for the Community Coaching trial. The groups adequately span different demographics, with focus on affluent and disadvantaged areas within urban and rural environments to effectively measure the potential effect of the trial on a wide representative population. NEL will confirm with the successful Local Authorities once SEPD have completed suitability assessments of the selected substations.

SEPD have appointed Selex as the substation monitor supplier, the 'Gridkey' system having been identified as the best option to meet Project requirements during the tender process. An initial unit has performed well under testing with SEPD and full delivery of the required units will be completed by mid December. Once assessments have been completed we expect all monitors to have been installed by the end of December which will allow a full twelve month period of benchmark monitoring pre-trial.

To maintain a clear focus on the successful management of the various packages of work the Project has held 6 Project Partner Review Board (PPRB) meetings, enabling all partners to meet at least once a month to discuss progress and plan activities. Representatives of EA Technology, BMG and Engage Consulting have also attended PPRB's in December to offer updates and gain insight into their specific work streams.

1.1 Risks

Ofgem guidance: The risks section reports on any major risks and/or issues that the DNO encountered, including any risks which had not been previously identified in the Project Direction. The DNO should include a short summary of the risk and how it affects (or might affect) delivering the Project as described in the full submission. When relevant, the DNO should group these key risks under the following headings:

- a. recruitment risks describe any risks to recruiting the numbers of customers to take part in the Project as described in the full submission and how these will impact on the Project and be mitigated;
- b. procurement risks describe any risks to procuring the equipment and/or services needed for the Project, as described in the full submission, and how these will impact on the Project and be mitigated;
- c. installation risks describe any risks to the installation of the equipment (including in customers' homes, and/or large scale installations on the network) and how these will impact on the Project and be mitigated; and
- d. other risks.

Project risk management is considered in detail in section 5 of this report; a high level summary is shown below:

Risk Description	Further details and impact	Controls
Recruitment		
Inability to recruit necessary numbers for trials	May not reach the intended numbers deemed necessary. Would make it difficult to observe small changes in behaviour and have confidence that changes are result of interventions, not other factors	Constant monitoring will be required of this key milestone. Regular review meetings will be carried out during this process. Existing escalation process in place via Project Director to SEPD ISB
Lack of community 'buy in' to Community Coaching trial	Community could reject engagement of Community Coach, resulting in lack of learning and observable changes in consumption	Will have support of stakeholder orgs and appreciation of community's pressure points/aspirations
Procurement		
None		
Installation		
Monitoring equipment cannot be installed Failure of equipment and lack of data	May be unable to install equipment, or the equipment may fail to operate correctly and not transmit data back to secure server, impacting on ability to observe and analyse behaviour and impact of interventions	Have already doubled the length of time to recruit customer recruitment and will train staff. Equipment to be paired up at installation, if fails once deployed Maingate can observe and seek to rectify quickly
Other		
None		

1.2 Learning Outcomes

Ofgem guidance: The learning section reports on the learning outcomes outlined in the Full Submission. This section should include, but is not limited to:

- a. a summary of the key learning outcomes delivered in the period;
- b. a short overview of the DNO's overall approach to capturing the learning;
- c. the main activities towards third parties which have been undertaken in order to disseminate the learning mentioned in a.; and
- d. the DNO's internal dissemination activities.

Please note that these two subsections should only give an overview of the key risks and the main learning. They should not replace the more detailed information contained in the "Learning outcomes" and "Risk management" sections of the progress report.

Learning outcomes are considered in detail in section 6 of this report, however during this initial period, the main focus has been on setting up the project to ensure successful trials in the future.

Key learning outcomes

The review of previous energy efficiency projects report completed by DNV GL was submitted to meet SDCR 1 requirements shortly after the last progress report was issued and illustrated the learning through analysis for the most effective means of engaging with customers.

SDRC 2.1 calls for the creation of the initial customer model, and University of Southampton's report "SAVE SDRC 2.1: SAVE Customer Model Framework Specification" documenting this is due to be submitted at the end of this reporting period.

SDRC 7.1 calls for the initial network model to be created and as with SDRC 2.1 the report is due to be submitted at the end of this reporting period. EA Technology have produced the report "SDRC 7.1: Initial Network Model" which introduces the Network Modelling Tool.

In addition, the following 'Learning Moments' have been captured (ad hoc and process related learning):

- Reviewing appliance usage to target Smart plug installation
- Smart Plug installation constraints, relating to the rating of the Smart plugs and the expected wiring arrangements in domestic properties
- Monitoring synchronisation to enable greater accuracy and more efficient analysis of data
- Household composition changes and the effect this may have on a households consumption during interventions

Approach to learning capture

The approach to learning capture is focussed on capturing both structured learning in the forms of SDRC reports, and unstructured learning via lessons learned reviews and ad-hoc recording of

insights. This aims to capture results drawn out from data analysis and reviews of activities, and also tacit knowledge that may not typically be captured in formal documents.

Crucial to learning capture is the dissemination of this knowledge, and building on previous experience and feedback the Project will seek to tailor the messages and methods of dissemination to the audiences' needs to maximise the effectiveness.

Summary of Third Party targeted dissemination

- DECC Science & Innovation and Heat & Industry meeting
- Customer Engagement report findings at SmartGrid GB seminar
- Ofgem Work Stream 6 workshop
- LCNI Conference
- Lancaster and UCL End User Energy Demand Centers

Summary of internal targeted dissemination

The Project uses organised events such as Steering Boards and Team Briefs as a means of internally disseminating progress and information in a structured manner, with informal communications between colleagues and departments also acting as a means of raising awareness of the Project and progress towards delivering learning.

Table of Contents

1	Ex	recutive summary	2
•	1.1	Risks	4
•	1.2	Learning Outcomes	5
2	Pr	oject manager's report	8
3	Co	onsistency with full submission	14
4	Ri	sk management	15
5	Su	uccessful delivery reward criteria (SDRC)	16
6	Le	earning outcomes	17
6	5.1	Approach to learning capture	18
á	a.	Capture of structured learning	18
k) .	Capture of unstructured learning	19
() .	Dissemination of learning	19
6	5.2	Learning Moments	19
6	5.3	Dissemination Activities	20
7	Вι	usiness case update	22
8	Pr	ogress against budget	23
9	Ba	ank account	24
10	Int	tellectual Property Rights (IPR)	25
11	Ot	ther	26
12	Ac	ccuracy assurance statement	27
Ар	pen	dix - Redacted copy of bank account transactions	28

2 Project manager's report

Ofgem guidance: The Project manager's report should be a more detailed version of the Executive Summary. This section should describe the progress made in the reporting period against the Project plan. Any key issues should be drawn out and described in detail, including how these issues were managed. The DNO should also include details of deliverables and/or events, referring where necessary to other sections of the PPR. This section should also provide an outlook into the next reporting period, including key planned activities. It should describe any key issues or concerns which the Project manager considers will be a major challenge in the next reporting period.

The Project has made good progress in the last period as it moves towards the delivery phase of the Project plan, with the key aims of this period being the creation of initial Customer Model SDRC 2.1, Network Model SDRC 7.1, and the appointment of BMG who will undertake customer recruitment for the trials. SEPD have secured through tender process the required substation monitoring equipment for trial 4 of the Project and appointed EA Technology for the delivery of the Network Model.

Interaction between SEPD and each of the project partners has continued successfully to ensure all project parameters are adhered to throughout the recruitment planning stage, with firm expectations defined for recruitment dates and total customers required to reflect the risks associated with this phase of the Project (further detail available in section 4, Risk Management). There has also been proactive communication and collaboration from the project team to EA Technology and University of Southampton who are respectively responsible for the delivery of the Network and Customer models.

University of Southampton have completed SDRC 2.1, the finalisation of customer model specification and implementation which is currently under review prior to submission. The prototype model has been implemented using synthetic and example data to prove its effectiveness in relation to the expected data the Projects trials and control groups will provide. The model will capture, represent and allow analysis of the data received from participants monitoring systems and the substation monitors, supporting the individual trials throughout their iterations, the ongoing development of the model and the development of the final Network Investment tool (SDRC 7.3).

The model combines microsimulation and spatial modelling techniques alongside time-of-use diaries to provide an accurate representation of fluctuating demand across a full range of properties within a network area, reflective of alternating seasonal and temporal peaks. It will also accurately measure the effect of specific Project trial inputs against specified demographic groups to illustrate the effectiveness of interventions within a modelled network area. Further development of the Model will continue throughout the Project as more specific data is collected from the trial and control areas and the response to interventions.

To ensure the recruitment of participants in the trial University of Southampton have completed the initial recruitment and phase one surveys. These are essential segments in the recruitment process

and their formation utilised research from previous trials carried out by the University, both documents have been circulated to the Project team to gain further comment towards the final versions.

EA Technology have been appointed to construct and, over the course of the Project finalise the Network Model which will simulate the real-time operation and management of Distribution Networks and meet the requirements if SDCR 7.1. This will allow the potential network performance impact of energy efficiency solutions to be accurately gauged against traditional reinforcement within the technical specifications of a chosen network.

A set of templates representing a broad scope of existing networks have been collated alongside a network builder tool so specific networks can be constructed within the model provide a flexible solution for detailing areas where demand is nearing capacity. The representative network reaction to interventions can then be measured from a technical perspective, detailing voltage and thermal conditions of equipment where interventions, traditional reinforcements or the Project solutions, have been utilised to mitigate peak or general loading issues.

Following successful tender BMG have been appointed as the Projects recruitment company and will hold responsibility for the recruitment of 4,600 individual properties to participate in the trial and control groups required for the Projects energy efficiency solutions. Wireless Maingate have confirmed their ability to provide training to BMG staff allowing the installation of monitoring equipment to coincide with a customer's commitment to join the Project which mitigates the risks associated with repeat visitation from different partners.

BMG have completed initial testing of the Project recruitment material which generated feedback and identified potential questions on scope of the project and detail provided, this has resulted in the construction of a FAQ document which will support the invitation to join the Project. BMG have confirmed that all recruitment activities will be completed before the next reporting stage of the Project in time for the required baseline data to be accrued before actual trials commence.

Work has begun on the Network Price Model which will form an intrinsic part of the Network Investment Tool the Project aims to deliver. This model which is being developed by Engage Consulting will measure the cost versus value of current, physical reinforcement against the innovative solutions which the Project's trials aim to prove as valid alternatives. Using an options based approach and probabilistic assessment of network need the model will assess the value of energy efficiency measures to flexibly address network need over time. As the Project supplies data on the financial impact versus positive effect on demand profiles this data will be used to further develop the Network Price Model ensuring its effectiveness for application within the final Network Investment Model (SDRC 7.3)

Neighbourhood Economics have completed the area selection process and preparation of area profiles for those shortlisted following an interactive selection process at Local Authority level. In partnership with SEPD network planners the final four trial and control areas required for the

Community Energy Coach have now been confirmed. The 22 LV substations are now being physically assessed for equipment configuration with planned installation to be completed in December.

Engagement with successful Local Authorities (LAs) will then increase to reflect the transition from planning to delivery, namely the selection and appointment of host and partner organisations to employ and support the Community Energy Coach. Unsuccessful LAs will also be engaged with to receive updates on the projects progress should any aspect be desirable as an LA led energy efficiency project looking to address social obligations such as fuel poverty reduction and finally for the potential to form a 'critical friends' group monitoring the progress of the trial.

Additionally Neighbourhood Economics have agreed a template for the multi-agency project manual which will now be formed in collaboration with host and partner organisations for the Community Energy Coach trial under the direction of SEPD and the Project partners. The multi-agency project manual will provide structure and governance for the host/partner organisations involved with the Community Energy Coach such as role definition, responsibilities and financial commitment, ensuring full adherence to the Project principles and full submission.

A key deliverable for the Community Energy Coach trial is the supply and installation of LV Substation monitors across the identified trial areas, SEPD tender process identified the Selex Gridkey system as the most suitable to meet the Project requirements. The first unit has already undergone more detailed testing with SEPD with the remaining units scheduled for delivery in early December, full installation across the trial areas is expected by the end of December, providing comprehensive baseline load data across a period of 12 months for the 22 identified substations which constitute the trial and control areas.

The Project has secured clip-ammeters for household monitoring which offer greater accuracy, ease of installation and less intrusion for participants than the optic sensors initially identified as the potential monitoring solution. Wireless Maingate have offered this equipment as a desired alternative in acknowledgment of some maintenance issues with Optic Sensors over the lifespan of the Project, namely battery life and secure fitting. The clip-ammeters benefit from a longer operational period between required battery replacements, reducing the requirement for participants to physically interact with the equipment or for Project members to visit the properties directly. The clip-ammeters also benefit from a more secure fitting to the participants electrical installation, reducing potential slippage from installation point which would result in a Project partner making return visits to participating properties. This preferred alternative has been secured without negative effect on the allocated budget for the household monitoring element of the Project.

DNV GL have completed their initial development of the Projects trial measures accompanied by high level strategic options for the LED lighting, data led engagement campaign and DNO price signal interventions. These individual plans have been detailed with the potential trial options and have been refined against the initial hypothesis of the Project aims, maximising the effectiveness of each intervention while adhering to the Project boundaries.

The development has also identified the opportunity to further refine project implementation and add benefits to the potential learning the Project aims to achieve. DNV GL have specified by separating the trials into three periods allowing dissemination and finessing periods in between, that this added time allows greater scope for adjustment in turn increasing the potential effect each trial will have on the chosen group. This opportunity is currently being assessed by the Project partners to ensure the potential alteration falls within the full bid submission and the benefits are desirable.

Further analysis has been completed by DNV GL of electricity peak loads and seasonality which has been used to produce the smart plug hierarchy logic and a suggested short list of targeted appliances for the recruitment and installation phase of the Project. This short list acknowledges the difficulties associated with connecting smart plugs to certain appliances, cookers for example which are connected straight to a specified circuit in most cases, and prioritises acceptable alternatives such as heating and other high consumption/low efficiency appliances.

In October SEPD hosted the LCNF conference alongside the ENA at the Aberdeen Exhibition Centre and the Project was introduced to delegates within the 'Social Obligations' section. The presentation, a collaboration between SEPD and NEL, provided an overview of the Project, lifespan and aims, then went on to give a detailed explanation of the Community Coach intervention, reflecting the innovative nature of this trial approach and the potential benefits to communities involved. Response from the conference was positive and has presented opportunities for potential collaboration between represented companies/academic bodies and SEPD later in the Project phases.

SEPD have now submitted updated versions of the Data Protection Strategy and Customer Engagement Strategies to reflect minor adjustments in the preferred Project approach and the appointment of modelling and recruitment providers. Management of appointed providers and their integration to the project has been a primary function of SEPD within the last reporting period with key focus on facilitating learning and collaboration between partners, enabling a multifaceted response to questions and a complete solution to potential problems.

In order to ensure visibility across the Project and assist with planning and management, Project Partner Review Boards are continuing on a monthly basis, with at least one person from each Project Partner attending each meeting. The purpose of the Project Partner Review Board is to:

- Develop and implement a project plan that meets Project Direction, Full Bid Submission and SDRC requirements
- Record Project progress
- Review progress against the planned program (time and cost)
- Revise, where appropriate the Project plan to ensure progress continues to requirements
- Review risks and mitigations
- Capture and review project learning
- Ensure that the relevant information is provided for Innovation Steering Board meetings.

Project assurance established as part of the Project Management approach ensures that:

- Thorough liaison between Suppliers, Project Partners, SEPD and Ofgem is maintained throughout the Project
- The Project remains viable
- · Risks are controlled
- The Project is delivered in accordance with the Full Bid Submission and subsequent Project Direction
- Project participant needs are being met or managed
- · Internal and external communications are working
- Any legislative constraints are observed
- The relevant resources are in place

These items are regularly checked to ensure delivery is consistent with, and continue to meet the scope of works in, the Full Bid Submission and subsequent Project Direction and that the SDRC are met. This has ensured that good progress has been made against all current deliverables and planning started for future work packages.

Through the monthly Project Partner Review Board meetings and additional smaller-scale meetings multiple areas of consideration have been addressed, ranging from recruitment to equipment installation practicalities. Following a mixture of in-depth discussions and research, the following decisions on the approach to be taken have been agreed:

- Pilot the recruitment approach on a small area outside of the Projects scope allowing communications method, delivery and content to be adapted and perfected before implementation without the risk of effecting potential participants.
- In the event that a participant moves house the Project will continue where possible to
 monitor the property, not the exiting participant, which will provide valuable learning of how to
 engage with new residents and short-term and/or long-term effects as a result of occupancy
 changes.
- Installers to provide replacement batteries for monitoring equipment when it is installed and
 potentially incentivise the physical battery replacement which will occur twice during the
 Project span. This will avoid excess cost of mailing/attending participating properties to
 replace batteries throughout the Project.

The next reporting period will be filled with key activities:

- Delivery of SDRC 2.1 and SDRC 7.1 reports (technically in this reporting period however this
 report is due before the SDRC deadline)
- Recruitment of participants completed
- Installation of customer monitors completed
- Identification of control and trial sample groups
- Installation of substation monitors completed

With the Partner work packages, review sessions and good communications established between all parties there are no issues or concerns that we foresee occurring in the next reporting period.

3 Consistency with full submission

Ofgem guidance: The DNO should confirm that the Project is being undertaken in accordance with the full submission. Any areas where the Project is diverging or where the DNO anticipates that the Project might not be in line with the full submission should be clearly identified. The DNO should also include, where appropriate, references to key risks identified under "Risk Management".

The SAVE project is being conducted in accordance with the full submission. To ensure all commitments from this submission are completed in a timely and efficient manner, the Project has developed a comprehensive structure with clear linkages to the text of the full submission.

The Project has identified an opportunity to further refine project implementation. The full submission refers to two active trial periods when the energy efficiency solutions would be offered to the respective groups. During the last reporting period the Project partners have identified added benefits to the Projects potential learning by separating the trials into three periods, allowing dissemination and finessing periods in between. This added time allows greater scope for adjustment, increasing the potential effect each trial will have on the chosen group. The refinement of trial periods also allows greater granularity of detail in the historic 'high demand, high peak' winter period while adhering to trialling effects during warmer months.

At this stage the Project partners are drawing conclusion as to the likely benefits and potential risks of adjusting the trial periods.

4 Risk management

Ofgem guidance: The DNO should report on the risks highlighted in box 26 of the full submission pro forma, plus any other risks that have arisen in the reporting period. DNOs should describe how it is managing the risks it has highlighted and how it is learning from the management of these risks.

The Project risk register is a live document designed to identify actual and potential barriers to the satisfactory progress of the SAVE project. The register is used to target resources and to develop control measures and mitigations. The SAVE risk register is a single log of risks as identified by SEPD, University of Southampton, Maingate, DNV GL, Future Solent and Neighbourhood Economics. The register is reviewed at the monthly Project Partner Review Boards and is reported to the SEPD Project Steering Group.

Risks are assessed against their likelihood and impact, where the impact considers the effect on cost, schedule, reputation, learning, the environment and people. Risks are scored before (inherent) and after (residual) the application of controls. Risks which are closed are removed from the live register, with any learning captured through the Learning Moments and Project Trials described in section 7.

Increased focus is placed on risks with amber or red residual scores and also on all risks with a red inherent score (to ensure there is no over-reliance on the controls and mitigation measures). At present, there are eight risks that fall into this category:

			Inherent									F	Resid	dual			Inherent	Residual
				lmp	act							lmp	oact					
Risk ref#	Risk Description	Cost	Schedule	Reputation	Learning	Environment	People	Likelihood	Risk Control/Mitigation Actions	Cost	Schedule	Reputation	Learning	Environment	People	Likelihood	Score	Score
vvorkpackag	ge 1 - Project Management		l l	<u> </u>	ı	ı		ı	T		Π	Γ		<u> </u>	1 1			
WP1-3	Lack of budget to complete project and over spend on budget	5	5	3	5	1	1	3	Following meetings and workshops with project partners costs were built from bottom up so budget available providing partners work to expectations. Value for money exercises will be carried out with Monitoring, Recruitment and LED trial	3	3	3	1	1	1	2	15	6
WP1-4	Inability of recruiting the necessary number of customers for the trials across the Solent area	2	5	4	5	1	1	4	Constant monitoring will be required of this key milestone. Regular review meetings will be carried out during this process. Existing escalation process in place via Project Director to SEPD ISB	1	2	3	2	1	1	3	20	9
WP1-5	Lack of data available from the Trial zones and an overall lack of learning to SEPD.	1	1	2	5	1	1	3	Regular meetings will continue in this area. Regular reviews of this important milestone will continue. Escalation through the ISB.	1	1	2	2	1	1	2	15	4
WP1-7	Lack of architect or design resource may hamper completion of the checks necessary to ensure the correct function of the wider 'system' beyond the Maingate mV io system	1	5	4	4	1	1	4	Resourcing of architect and designer to ensure suitable validation of Low Level Design. Able to call upon emergency SSEPD resource if not done in time	1	3	2	2	1	1	3	20	9
Workpackag	ge 2 - Customer Model Development Data A	nalys	sis ar	nd Re	porti	ng												
WP2-3	Failure of equipment and lack of data	4	4	4	5	1	1	3	Equipment to be paired up before recruitment, if fails once deployed Maingate can observe and seek to rectify quickly	2	2	4	3	1	1	3	15	12
Workpackag	Workpackage 5 - Meter & Data Gathering, Collation, Central Data Repository																	
WP5-1	Lack of broadband coverage in the study areas	1	1	3	5	1	1	3	Maingate and SEPD to review coverage and introduce new plans if required	1	1	2	3	1	1	2	15	6
WP5-2	Monitoring equipment cannot be installed	1	4	4	5	1	1	4	Have already doubled the length of time to recruit participants and will train staff	1	3	3	3	1	1	3	20	9
WP5-7	Inability to synchronise meter readings and being given 15min or half hourly readings to interpret	2	3	1	4	1	1	4	Maingate to ensure synchronised data sampling	1	1	4	4	4	1	2	16	8

5 Successful delivery reward criteria (SDRC)

Ofgem guidance: The DNO should provide a brief narrative against each of the SDRCs set out in its Project Direction. The narrative should describe progress towards the SDRCs and any challenges the DNO may face in the next reporting period.

The SAVE project has identified eight Successful Delivery Reward Criteria (SDRC). The majority of these are split into a number of sub components and each component has defined criteria, evidence and a target date for completion. The following table lists the individual SDRC components in chronological order and details the Project's progress towards their achievement for those due to be completed in this reporting period (up to December 2014) and into the next reporting period (up to June 2015).

Completed (SDRC met)	Emerging issue, remains on target	SDRC completed late
On target	Unresolved issue, off target	Not completed and late

SDRC	Due	Description	Status
SDRC 3.1	28/02/2014	Create Customer Engagement Plan	Complete – submitted to Ofgem on 28/02/2014
SDRC 8.9	19/06/2014	6 monthly Project Progress Report	Complete - and due to be submitted every 6 months until end of the Project
SDRC 1	30/06/2014	Produce report on learning from UK and international energy efficiency projects and the impact on the design and implementation of the SAVE project	Complete – submitted to Ofgem 30/06/2014
SDRC 8.9	19/12/2014	6 monthly Project Progress Report	Complete - and due to be submitted every 6 months until end of the Project
SDRC 2.1	31/12/2014	Create initial customer model	On target- due to be submitted to Ofgem by SDRC date 31/12/14
SDRC 7.1	31/12/2014	Create initial network model and parameters for tool	On target- due to be submitted to Ofgem by SDRC date 31/12/14
SDRC 5	30/06/2015	Identify control and sample groups	On target - UoS, DNV and BMG planning process of group filtration
SDRC 6	30/06/2015	Install 80% of clip-ammeter	On target - WM and BMG coordinating delivery, training and installation

Beyond the next reporting period, the following table lists the remaining SDRCs in chronological order:

SDRC	Due	Description
SDRC 4	30/06/2016	Create commercial energy efficiency measures
SDRC 2.2	30/12/2016	Revise customer model
SDRC 7.2	30/12/2016	Revise network model and network investment tool
SDRC 3.2	31/01/2017	Hold meetings to share progress, experiences and next steps with customers involved in trials on a six monthly basis
SDRC 2.3	31/05/2018	Finalise customer model
SDRC 7.3	31/05/2018	Finalise network investment tool
SDRC 8.1	29/06/2018	Produce project closure report
SDRC 8.2	29/06/2018	Produce network investment tool key outcomes report (including comparison of trial method impacts)
SDRC 8.3	29/06/2018	Produce LED trial report
SDRC 8.4	29/06/2018	Produce DNO price signals direct to customers trial report
SDRC 8.5	29/06/2018	Produce network pricing model report
SDRC 8.6	29/06/2018	Produce customer and network modelling report

SDI	RC 8.7	29/06/2018	Produce data-informed engagement trial report
SDI	RC 8.8	29/06/2018	Produce community coaching trial report

6 Learning outcomes

Ofgem guidance: The DNO should briefly describe the main learning outcomes from the reporting period. It should update Ofgem on how it has disseminated the learning it generated as part of the Project over the last six months

The learning objectives for the Project are:

- to gain insight into the drivers of energy efficient behaviour for specific types of customers
- to identify the most effective channels to engage with different types of customers
- to gauge the effectiveness of different measures in eliciting energy efficient behaviour with customers
- to determine the merits of DNOs interacting with customers on energy efficiency measures as opposed to suppliers or other parties

These will be answered as a result of carrying out the following project objectives:

- Create hypotheses of anticipated effect of energy efficiency measures (via commercial, technical and engagement methods)
- Monitor effect of energy efficiency measures on consumption across range of customers
- Analyse effect and attempt to improve in second iteration
- Evaluate cost efficiency of each measure
- Produce customer model revealing customer receptiveness to measures
- Produce network model revealing modelled network impact from measures
- Produce a network investment tool for DNOs
- Produce recommendations for regulatory and incentives model that DNOs may adopt via RIIO

6.1 Learning Outcomes

SDRC 1 called for the project to review learning from other projects, and so on the final day of the last reporting period the report "Report 1 - Lessons Learnt on Energy Efficiency & Behavioural Change" by DNV GL was submitted to Ofgem. The report is a thorough review of customer engagement in both the energy sector and wider industries, in the UK and internationally, evaluating which measures have been most effective in terms of motivating behavioural change and which have worked less well. The aim is to ensure that the project can build on previous learning in the field and not repeat previous mistakes. By including specific reviews of projects from non-energy sectors it is able to focusing on particularly interesting and creative ways that behaviour change has been successfully achieved, as well as those LCNF projects where domestic customer engagement has taken place.

The report provides the evidence base for developing customer engagement trials in the SAVE project and one of the key findings is that the greater the understanding of the customer from the outset, the greater the possibility the project has of successfully tailoring approaches that will motivate the customer to act. This reinforces the approach the trials are taking with regards to surveys and monitoring. The projects reviewed repeatedly demonstrated that customers need more than one reason to engage and change behaviour so careful thought will be required to construct programmes that layer and combine measures to provide a compelling behaviour change proposition. However, this also needs to be carried out carefully to ensure that there is enough control to still be able to distinguish the impact of different measures. This will be one of the major challenges for the SAVE

project. A further challenge will be to successfully segment customers while maintaining general enough categories so that measures are still relevant if applied on a wider-scale.

SDRC 2.1 calls for the creation of the initial customer model, and University of Southampton's report "SAVE SDRC 2.1: SAVE Customer Model Framework Specification" documenting this is due to be submitted at the end of this reporting period.

The report lays out the applied research context for the Customer Model Framework and describes its key requirements before outlining the modelling approach than can meet these requirements and describes its conceptual foundations and method of implementation. In the absence of SAVE baseline data, which is to be collected from early 2015 onwards, it has been developed using example data to provide illustrations of the kinds of outputs that will be available in subsequent phases of development. The use of this data has shown that the methodology, which incorporates experimental and spatial microsimulation, produces results which can be readily analysed and the desired outputs produced. The model will of course be iteratively updated with new data inputs (and thus produce new outputs) as the project progresses.

SDRC 7.1 calls for the initial network model to be created and as with SDRC 2.1 the report is due to be submitted at the end of this reporting period. EA Technology have produced the report "SDRC 7.1: Initial Network Model" which introduces the Network Modelling Tool and simulates real-time operation and management of electricity distribution networks allowing network 'costs and benefits' to be evaluated with respect to both energy efficiency and traditional network reinforcement methods. Specifically the report defines the technical functional specifications by providing information on inputs, processes and outputs; and illustrates the application of the preliminary version of the Network Modelling Tool.

This application was carried out on two (urban and rural) real electricity distribution networks in the SEPD licence area. Network analyses were then developed to demonstrate the effectiveness of the energy efficiency interventions in relieving thermal constraints in the substation transformers, relieving thermal constrained power transfer problems in network circuits and relieving voltage constrained power transfer problems. This successfully demonstrated some of the technical functional features of the Network Modelling Tool and their respective application to real distribution networks. As with the Customer Model, it will be updated with new data inputs as the project progresses.

6.2 Learning Moments

The following 'Learning Moments' have been recorded during this reporting period.

Initial review of appliance usage to target smart plug installation

DNV GL reviewed the energy use analysis gathered as part of the bid preparation to reveal the most common appliances used at time of peak (on average across the year). This analysis indicated which make the largest contribution to peak and which are likely to coincide at the same time. On this initial

analysis it appears the best appliances to target could be the washing machine, dishwasher and tumble dryer – then possibly plug-connected space heating such as a portable heater or electric fireplace. Note: Cooking, Lighting and Audio/Visual use may not be easily altered but since their use is correlated could there be some inefficient practice that can be managed, i.e. turning the TV off whilst cooking.

Smart plug installation considerations

Upon producing the preference list for monitoring appliances it was noted that the smart plugs have a rating of 3kW so need to be mindful of what connecting to (i.e. space heaters). Also cookers are likely to be wired into housing circuit so the project will be unable to monitor them. The final consideration was that whilst some interviewers will be able to move appliances to fit plugs, others won't, and there are potential health and safety and insurance implications.

Monitoring synchronisation

The group considered the learning from the NTVV project whereby analysis is greatly helped when all half-hourly readings are synchronised, because if not the pre-analysis burden is increased and accuracy is reduced.

House movers- follow people or properties?

A decision had to be made as to whether the project follows 'people' or 'properties' when the composition of a house or the household changes. This is a fairly detailed topic and has merits associated with either choice (this could be summarised as network analysis benefits from maintaining the property link, or behavioural analysis benefits from maintaining the people link). Whilst there is a desire to do both, considering the budgetary and Business As Usual implications (whereby a DNO will not follow customers if they move out of their licence area) the decision was made to follow properties and attempt to recruit new occupants but if unable we could then try and follow the movers. This should provide valuable learning of how to engage with new residents and the short-term and/or long-term effects as a result of occupancy change.

6.3 Dissemination Activities

The table below shows the main dissemination activities which have been completed in this period:

Leading	Date(s)	Description
Partner		
DNV GL	Jul 2014	Lessons Learnt on Energy Efficiency & Behavioural Change
		SDRC 1 report submitted to Ofgem end of June and shared with project partners
		and other interested stakeholders in July
SEPD	Aug 2014	DECC Science & Innovation and Heat & Industry meeting
		Presented on the project's aims and trial designs and noted interest from both
		teams in future results
NEL	Aug 2014	Background Review of Good Practice in Community Engagement report
		Report produced on best practice and shared with project partners and Ofgem

DNV GL	Sep 2014	Customer Engagement report findings at SmartGrid GB seminar
		Presented the findings from SDRC 1 report into Customer Engagement in energy
		efficiency projects around the world
SEPD	Oct 2014	Ofgem Work Stream 6 workshop
		Presented on the ambitions of the project to audience interested in DSR, DG and
		Storage
NEL	Nov 2014	LCNI Conference
		Presented on the project and principally the Community Coaching trial and part it
		plays in Social Obligations
UoS	Nov 2014	Lancaster and UCL End User Energy Demand Centres
		Shared the plans for the project in multiple meetings and workshops, generating
		interest in plans for capturing good quality data

7 Business case update

Ofgem guidance: The DNO should note any developments or events which might affect the benefits to be gained from the Second Tier project. Where possible the DNO should quantify the changes these developments or events have made to the Project benefits compared to those outlined in the full submission proposal.

SSEPD's core purpose is to provide the energy people need in a reliable and sustainable way. To achieve this, our delivery priority is to deliver upgraded electricity transmission networks, operational efficiency and innovation in electricity and gas distribution networks as they respond to the decarbonisation and decentralisation of energy. The learning from the SAVE project will inform our strategy to deliver on this priority with the aim of supporting our core purpose.

Through these trials, SEPD hopes to quantify the most cost effective approach to having a measurable change in the operation of the distribution system and develop means of controlling the demand reduction in order to be able to rely on the demand reduction and defer or avoid network reinforcement.

Drawing on previous research and project learning the Project expects to see reductions of between 10-15% in overall electrical consumption for the methods being trialled, although this reduction and potential benefit to the networks is expected to vary depending on multiple variables.

Expected reductions achieved as a result of the interventions being trialled in the Project are shown below, with further scenarios detailed in the full submission proposal.

Average annual household consumption (kWhs per year)	4,226	4,226	4,226	4,226
Measure	LEDs	Data informed engagement	DNO rebates	Community Coaching
Average annual household lighting consumption (kWhs per year)	634			
Expected total reduction (%)	10.5	11	15	15
Expected annual reduction (kWhs per year)	444	465	634	634
Expected hourly reduction (kWhs)	0.05	0.05	0.07	0.07
Expected hourly reduction (Watts per hour)	5	5	7	7
Expected daily reduction (Watts per day)	122	127	174	174

Small Low Voltage Urban reinforcement	LEDs	Data informed engagement	DNO rebates	Community Coaching
Daily reduction on LV cable with 150 customers (kW)	18	19	26	26
Rating of circuit (kW)	200	200	200	200
Headroom made available (%)	9.12	9.55	13.03	13.03
Equivalent to connection a number of 3kW heat pumps or EVs now able to connect (without diversity)	6	6	9	9

SEPD has not noted any developments or events which might affect the wider business case outlined above and as detailed in the full submission proposal.

8 Progress against budget

Ofgem guidance: The DNO should report on expenditure against each line in the Project Budget, detailing where it is against where it expected to be at this stage in the Project. The DNO should explain any projected variance against each line total in excess of 5 per cent.

Project expenditure is within the budget defined in the Project Direction. The table below details expenditure against each line in the Project Budget and compares this with planned expenditure to date¹. Projected variances are also listed for changes >5%.

	Budget	Expenditure	Comparison with expected	Projected Variance (at project conclusion)		
		ITD	expenditure	(£K)	%	#
LABOUR	£2,445,883	£63,338	30%	0	0	
EQUIPMENT	£553,890	£433,838	105%	0	0	
CONTRACTORS	£4,735,730	£412,444	111%	0	0	
IT	£753,321	£2,979	100%	0	0	
TRAVEL & EXPENSES	£26,400	1	-	0	0	
PAYMENTS TO USERS	£428,302	ı	-	0	0	
DECOMMISSIONING	£257,938	-	-	0	0	
OTHER	£442,220	-	-	0	0	

Notes:

No notes associated with expenditure at this time

¹ Expenditure is compared with a dynamic assessment of project phasing which reflects the nature of specific contract payments and physical delivery milestones. A comparison of expenditure with phased budget will often indicate a payment lag due to the nature of invoicing processes.

9 Bank account

Ofgem guidance: The DNO should provide a bank statement or statements detailing the transactions of the Project Bank Account for the reporting period.

Where the DNO has received an exemption from Ofgem regarding the requirement to establish a Project Bank Account it must provide an audited schedule of all the memorandum account transactions including interest as stipulated in the Project Direction.

Transaction details for the SAVE Project Bank account during this reporting period are listed in the Appendix. This extract has been redacted to protect the financial details of transacting parties; the full, un-altered copy has been submitted in a confidential appendix to Ofgem.

A summary of the transactions to date are shown in the table below:

From	Apr-Nov 14
Northern Powergrid (Northeast) Ltd (NP NE)	299,021.25
Northern Powergrid (Yorkshire) plc (NP Yorkshire)	429,073.07
Scottish Power Distribution Ltd (SPD)	376,917.63
Scottish Power Manweb plc (SPM)	281,509.29
Eastern Power Networks plc (UKPN EPN)	677,125.39
South Eastern Power Networks plc (UKPN SPN)	426,350.69
Western Power Distribution (WPD)	1,472,096.72
Southern Electric Power Distribution (SEPD)	2,104,545.31
Scottish Hydro Electric Power Distribution (SHEPD)	141,699.60
SAVE Project Spend	-712,856.23
SAVE Interest (quarterly)	2,577.06
Closing Balance Nov 14	5,498,059.78

10 Intellectual Property Rights (IPR)

Ofgem guidance: The DNO should report any IPR that has been generated or registered during the reporting period along with details of who owns the IPR and any royalties which have resulted. The DNO must also report any IPR that is forecast to be registered in the next reporting period.

In commissioning project partners to commence project activities, the SAVE project has applied the default IPR treatment to all work orders (as defined in the Low Carbon Networks Fund Governance Document). This will ensure IPR which is material to the dissemination of learning in respect of this project is controlled appropriately.

No Relevant Foreground IPR has been generated or registered during the December 2013 – June 14 reporting period. No Relevant Foreground IPR is forecast to be registered in the next reporting period.

The SAVE project intends to gather details of IPR through the structure of individual project trials. Specifically, in concluding a project activities the following details will be gathered: 1) components required for trial replication and, 2) knowledge products required for trial replication.

11 Other

Ofgem guidance: Any other information the DNO wishes to include in the report which it considers will be of use to Ofgem and others in understanding the progress of the Project and performance against the SDRC.

No further details.

12 Accuracy assurance statement

Ofgem guidance: DNO should outline the steps it has taken to ensure that information contained in the report is accurate. In addition to these steps, we would like a Director who sits on the board of the DNO to sign off the PPR. This sign off must state that he/she confirms that processes in place and steps taken to prepare the PPR are sufficiently robust and that the information provided is accurate and complete.

This Project Progress Report has been prepared by the Project Manager and reviewed by the Project Delivery Manager before sign-off by the Director of Engineering, who sits on the Board of SEPD.

This report has been corroborated with the monthly minutes of the Project Steering Group² and the Project Partners Review Board to ensure the accuracy of details concerning project progress and learning achieved to date and into the future. Financial details are drawn from the SSE group-wide financial management systems and the Project bank account.

Prepared by: Alexander Howison Project Manager 8th December 2014

Reviewed by: Nigel Bessant Project Delivery Manager 9th December 2014

Final sign off: Alan Broadbent Director of Engineering

Alex Brent 15/12/14

27

² The Project Steering Board meets as part of an overall SSEPD Innovation Steering Board

Appendix - Redacted copy of bank account transactions

Bankline



Statement for account xx-xx-xx xxxxxxxx from 01/06/2014 to 30/11/2014

Date	Narrative	Туре	Debit	Credit	Ledger balance
	CLOSING BALANCE				5,498,059.78Cr
28/11/2014	NORTHERN ELECTRIC LCNF	BAC		53,634.14	5,498,059.78Cr
28/11/2014	NORTHERN ELECTRIC LCNF	BAC		37,377.66	5,444,425.64Cr
28/11/2014	SOUTHERN ELECTRI SAVE SEPD DNO	EBP		84,628.34	5,407,047.98Cr
28/11/2014	SOUTHERN ELECTRI SAVE SEPD LCNF	EBP		178,439.84	5,322,419.64Cr
28/11/2014	SCOTTISH HYDRO-E SAVE SHEPD DNO	EBP		17,712.45	5,143,979.80Cr
28/11/2014	R B S-SP MANWEB	BAC		35,188.66	5,126,267.35Cr
28/11/2014	R B S-SP DISTRIBUT	BAC		47,114.71	5,091,078.69Cr
26/11/2014	/RFB/WPD GROUP	CHP		183,119.08	5,043,963.98Cr
	**************** WESTERN POWER DI STRIBUTION (SW)P CHAPS TFR			200,22000	5,5 15,5 251
21/11/2014	UK PN OPERATIONS	BAC		53,293.83	4,860,844.90Cr
21/11/2014	UK PN OPERATIONS	BAC		84,640.67	4,807,551.07Cr
03/11/2014	SOUTHERN ELECTRI SAVE COSTS	EBP	712,856.23		4,722,910.40Cr
28/10/2014	NORTHERN ELECTRIC LCNF	BAC		53,634.14	5,435,766.63Cr
28/10/2014	NORTHERN ELECTRIC LCNF	BAC		37,377.66	5,382,132.49Cr
28/10/2014	SOUTHERN ELECTRI SAVE SEPD LCNF	EBP		178,439.84	5,344,754.83Cr
28/10/2014	SOUTHERN ELECTRI SAVE SEPD DNO	EBP		84,628.34	5,166,314.99Cr
28/10/2014	SCOTTISH HYDRO-E SAVE SHEPD DNO	EBP		17,712.45	5,081,686.65Cr
28/10/2014	R B S-SP MANWEB	BAC		35,188.66	5,063,974.20Cr
28/10/2014	R B S-SP DISTRIBUT	BAC		47,114.71	5,028,785.54Cr
27/10/2014	/RFB/WPD GROUP ************** WESTERN POWER DI STRIBUTION (SW)P CHAPS TFR	СНР		183,119.08	4,981,670.83Cr
21/10/2014	UK PN OPERATIONS	BAC		53,293.83	4,798,551.75Cr
21/10/2014	UK PN OPERATIONS	BAC		84,640.67	4,745,257.92Cr
07/10/2014	SOUTHERN ELECTRI REVERSE IAT ERROR	EBP	84,628.34		4,660,617.25Cr
07/10/2014	SOUTHERN ELECTRI SAVE SEPD DNO	EBP		84,628.34	4,745,245.59Cr
	BALANCE BROUGHT FORWARD				4,660,617.25Cr

Page 1 of 3

Statement for account **-** ******* from 01/06/2014 to 30/11/2014

Date	Narrative	Туре	Debit	Credit	Ledger balance
	BALANCE CARRIED FORWARD				4,660,617.25Cr
03/10/2014	NORTHERN ELECTRIC LCNF ************************************	BAC		53,634.14	4,660,617.25Cr

30/09/2014	30SEP-GRS ******	INT		2,024.05	4,606,983.11Cr
29/09/2014	R B S-SP MANWEB	BAC		35,188.66	4,604,959.06Cr
9/09/2014	R B S-SP DISTRIBUT	BAC		47,114.71	4,569,770.40Cr
26/09/2014	NORTHERN ELECTRIC LCNF	BAC		53,634.14	4,522,655.69Cr
26/09/2014	NORTHERN ELECTRIC LCNF	BAC		37,377.66	4,469,021.55Cr
26/09/2014	SCOTTISH HYDRO-E SAVE SHEPD DNO LCN	EBP		17,712.45	4,431,643.89Cr
26/09/2014	SOUTHERN ELECTRI SAVE SEPD DNO CONT	EBP		84,628.34	4,413,931.44Cr
26/09/2014	SOUTHERN ELECTRI SAVE SEPD LCNF	EBP		178,439.84	4,329,303.10Cr
26/09/2014	/RFB/WPD GROUP ************	CHP		183,119.08	4,150,863.26Cr
	WESTERN POWER DI STRIBUTION (SW)P CHAPS TFR				
10/09/2014	UK PN OPERATIONS	BAC		53,293.83	3,967,744.18Cr
10/09/2014	UK PN OPERATIONS	BAC		84,640.67	3,914,450.35Cr
28/08/2014	NORTHERN ELECTRIC LCNF	BAC		37,377.66	3,829,809.68Cr
8/08/2014	SOUTHERN ELECTRI SAVE SEPD LCNF	EBP		178,439.84	3,792,432.02Cr
28/08/2014	SCOTTISH HYDRO-E SAVE SHEPD DNO LCN	EBP		17,712.45	3,613,992.18Cr
28/08/2014	R B S-SP MANWEB	BAC		35,188.66	3,596,279.73Cr
28/08/2014	R B S-SP DISTRIBUT	BAC		47,114.71	3,561,091.07Cr
27/08/2014	UK PN OPERATIONS	BAC		53,293.83	3,513,976.36Cr
27/08/2014	UK PN OPERATIONS	BAC		84,640.67	3,460,682.53Cr
27/08/2014	SOUTHERN ELECTRI SAVE SEPD DNO CONT	EBP		84,628.34	3,376,041.86Cr
26/08/2014	/RFB/WPD GROUP	CHP		183,119.08	3,291,413.52Cr
	**************** WESTERN POWER DI STRIBUTION (SW)P CHAPS TFR				
28/07/2014	NORTHERN ELECTRIC LCNF	BAC		53,634.14	3,108,294.44Cr
28/07/2014	NORTHERN ELECTRIC LCNF	BAC		37,377.66	3,054,660.30Cr
28/07/2014	SCOTTISH HYDRO-E SAVE SEPD DNO	EBP		17,712.45	3,017,282.64Cr
28/07/2014	SOUTHERN ELECTRI SAVE SEPD LCNF	EBP		178,439.84	2,999,570.19Cr
28/07/2014	SOUTHERN ELECTRI SAVE SPED DNO	EBP		84,628.34	2,821,130.35Cr
28/07/2014	/RFB/WPD GROUP **************** WESTERN POWER DI STRIBUTION (SW)P CHAPS TFR	СНР		183,119.08	2,736,502.01Cr
	BALANCE BROUGHT FORWARD				2,553,382.93Cr

Statement for account **-**-** ******* from 01/06/2014 to 30/11/2014

Date	Narrative	Туре	Debit	Credit	Ledger balance
	BALANCE CARRIED FORWARD				2,553,382.93Cr
28/07/2014	R B S-SP MANWEB	BAC		35,188.66	2,553,382.93Cr
28/07/2014	R B S-SP DISTRIBUT	BAC		47,114.71	2,518,194.27Cr
24/07/2014	SOUTHERN ELECTRI SAVE INT COSTS	EBP		23.94	2,471,079.56Cr
15/07/2014	UK PN OPERATIONS ************************************	BAC		53,293.83	2,471,055.62Cr
15/07/2014	UK PN OPERATIONS	BAC		84,640.67	2,417,761.79Cr
30/06/2014	30JUN-GRS ******	INT		529.07	2,333,121.12Cr
27/06/2014	NORTHERN ELECTRIC LCNF	BAC		53,634.14	2,332,592.05Cr
27/06/2014	NORTHERN ELECTRIC LCNF	BAC		37,377.66	2,278,957.91Cr
27/06/2014	SOUTHERN ELECTRI SAVE SEPD LCNF	EBP		178,439.84	2,241,580.25Cr
27/06/2014	SOUTHERN ELECTRI SAVE SEPD	EBP		84,628.34	2,063,140.41Cr
27/06/2014	SCOTTISH HYDRO-E SAVE SHEPD DNO	EBP		17,712.45	1,978,512.07Cr
26/06/2014	/RFB/WPD GROUP *******	CHP		183,119.08	1,960,799.62Cr
	WESTERN POWER DI STRIBUTION (SW)P CHAPS TFR				
26/06/2014	R B S-SP MANWEB	BAC		35,188.66	1,777,680.54Cr
26/06/2014	R B S-SP DISTRIBUT	BAC		47,114.71	1,742,491.88Cr
20/06/2014	UK PN OPERATIONS ************************************	BAC		53,293.83	1,695,377.17Cr
20/06/2014	UK PN OPERATIONS ************************************	BAC		84,640.67	1,642,083.34Cr
10/06/2014	SOUTHERN ELECTRI SOUTHERN ELECTRI	EBP		15,683.29	1,557,442.67Cr
10/06/2014	SOUTHERN ELECTRI SOUTHERN ELECTRI	EBP		66,237.19	1,541,759.38Cr
	OPENING BALANCE				1,475,522.19Cr
Totals			797,484.57	4,820,022.16	