



## **SAVE (Solent Achieving Value from Efficiency)**

### **Project Progress Report**

Project Number	SSET206
DNO	Southern Electric Power Distribution Ltd
Reporting Period	January 2014 – June 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 to manage and deliver the Project, including the University of Southampton, Maingate, Future Solent, Neighbourhood Economics 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.

The start of this reporting period marks the operational beginning of the Project, moving from bid stage planning to project delivery. The Project has made good progress against the planned timescales in this reporting period, with a mix of accomplished deliverables and development of tasks leading towards deliverables expected later in the Project.

A key activity during this early stage of the Project has been working with partners' legal and commercial teams to ensure that all necessary contracts and work orders are written, approved and placed, with all partners showing great commitment to the Project by working towards deliverables in good faith before the documents are signed.

To maintain a clear focus on the successful management of the various packages of work the Project has held 5 Project Partner Review Board (PPRB) meetings, enabling all partners to meet at least once a month to discuss progress and plan activities. Partners have maximised this opportunity, organising meetings with key stakeholders around the PPRBs.

There has been early engagement with external stakeholders, with Neighbourhood Economics meeting several Local Authorities to introduce the Project and seek assistance with the Community Coaching trial, in terms of both identifying target communities and potentially hosting the Coach when the trial begins. DNV GL have held a Customer Engagement “Lessons Learnt” workshop in January which sought existing projects to share insights into engaging and changing customer behaviour in relation to their energy consumption, and then using this information to help inform the planned design of the trials in the SAVE project.

A review into findings from previous energy efficiency projects has been carried out, with the final report due at the end of June, including recommendations and suggestions on how to improve the design and implementation of the SAVE project.

This has also been used to design the approach to customer engagement and the subsequent submission of the Customer Engagement Plan. Linked with this was an interim Data Protection Strategy which covers an initial exercise to help refine the approach to the Project's recruitment activities and detailed design.

Additionally, the learning with regards to provision and installation of equipment during trials was used to refine the tender for the customer recruitment activities, specifically the benefits of ensuring the recruitment organisation install the equipment at point of recruitment and maintaining themselves as the single point of contact with the customer. The invitation to tender was distributed in early May and the successful organisation will be appointed in the next reporting period.

## 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
<b>Recruitment</b>  Inability to recruit necessary numbers for trials          Lack of community 'buy in' to Community Coaching trial	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          Community could reject engagement of Community Coach, resulting in lack of learning and observable changes in consumption	Using accredited and experienced recruitment agency. Recruitment targets set to allow for drop-out. If numbers remain too low, the project can adopt an alternative co-factored approach          Having the support of stakeholder organisations who are in touch with target community's situation and drivers
<b>Procurement</b>  Break up of partnerships	Partners may walk away from Project, leading to severe impacts on ability to collect and produce learning	MOUs replaced by contracts and work orders, letters of support received from senior company representatives prior to this taking place
<b>Installation</b>  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	Doubled length of time to recruit customers in case of issues, will train staff on how to install equipment as part of site visit and also in how to manage typical problems,
<b>Other</b>	N/A	N/A

## 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 7 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**

As a result of carrying out a review of previous energy efficiency projects the Project has taken an early step towards understanding the most effective means of engaging with customers. Whilst this report is due for publication at the end of this reporting period to meet SDRC 1, some early conclusions have been shared to help shape future engagement approaches in the trials.

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

- Sharing learning- other DNOs willing to travel from around GB to capture and disseminate learning
- Data handling- a central data system required for all partners to access/contribute to
- Knowledge & Dissemination- need to consider language style used in dissemination
- Trial design- need to design for replicability
- Community Coaching trial- consider areas with existing network issues
- Customer engagement report- influencing detailed trial design
- Communications- need to set acceptable level of info trial participants can see

### **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**

- SmartGrid GB presentation
- Online media articles
- Customer engagement workshop

### **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.

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## 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 is making good progress against the Project plan, with the key aims of this period being to submit the Customer Engagement Plan, carry out the review into previous energy efficiency and customer engagement projects as part of SDRC 1 and prepare the tender for the recruitment of customers for the trials.

SEPD has worked closely with each Project partners to ensure all contracts and work orders are defined and agreed, with responsibilities and milestones for payments validated against the bid. The structure of the Project team has enabled the Project partners to work both individually and together towards the planning and delivery of these, and other, key deliverables.

Drawing on learning generated by the I2EV (My Electric Avenue) project, the production of a Management & Delivery document has enabled all members of the Project to have a clear understanding of how the Project should be managed and delivered. It is designed to complement each individual contract between SEPD and partners/suppliers by defining a common approach to management and delivery at a project level. The document covers project participants' roles and responsibilities, project management; distribution of responsibilities; Successful Delivery Reward Criteria (SDRCs); and Deliverables.

In order to ensure visibility across the Project and assist with planning and management, Project Partner Review Boards have been held 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, in accordance with section 7 (Knowledge Management)
- 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 continues 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:

- Deploy a small number of monitoring units within the homes of Project staff and residents of SSE's Zero Carbon Homes to carry out an initial systems and data validation exercise, and allow the Project to ensure the systems and processes are ready for the main trials
- To have recruiters provide and install the monitoring equipment to minimise potential issues and time delays with getting monitoring data from participating customers' homes
- To avoid using data sampling frequency of greater than half hourly, due to the impact on battery life of part of the monitoring technology and subsequent need to visit customers more often than planned and budgeted for

Focussing on engaging with stakeholder groups first rather than individual households, Neighbourhood Economics have already begun engagement with multiple Local Authorities in the Solent region in order to identify communities that could be selected as target areas for the Community Coaching trial, with a shortlist of areas already drawn up.

In preparation for subsequent trials and as to be reported in a subsequent SDRC report, DNV GL held a Customer Engagement "Lessons Learnt" workshop in January that was attended by over 20 representatives of LCNF and other projects that have attempted to change customer behaviour in relation to their energy consumption. The session encouraged an open and honest atmosphere and sought to identify formal and tacit knowledge of the approach and results of customer engagement activities from their projects (namely LCNF projects), using this information to help inform the planned design of the trials in the SAVE project. The outcomes of the workshop were then shared with attendees to assist them in utilising the details to improve their approach to engagement in future.

DNV GL also used the shared learning to help inform their research into findings from previous energy efficiency projects, drawing on the findings to provide recommendations and suggestions on how to



improve the design and implementation of the SAVE project. This report forms the required evidence to meet SDRC 1 and is on course to be submitted by the end of June.

SEPD also used this shared learning to help design the intended approach to customer engagement, which led to the submission of the Customer Engagement Plan in February, meeting SDRC 3.1. The Project also submitted an initial Data Protection Strategy designed to cover the initial systems and data validation exercise which will involve the deployment of a small number of devices at SSE's Zero Carbon Homes and University of Southampton project staff's properties, in order to help refine the approach to the main project's recruitment activities and detailed design. A more detailed Data Protection Strategy will subsequently be submitted in the next reporting period.

Additionally, the learning with regards to provision and installation of equipment during trials was used to refine the tender for the customer recruitment activities; specifically the benefits of ensuring the recruitment organisation install the equipment at point of recruitment and maintaining themselves as the single point of contact with the customer. The invitation to tender was distributed in early May and the successful organisation will be appointed in the next reporting period.

DNV GL has been responsible for reviewing previous energy efficiency projects in a bid to draw out recommendations that can be used to refine the approach taken in the Project. As a result of carrying out this review the Project has taken an early step towards understanding the most effective means of engaging with customers. Whilst this report is due for publication at the end of this reporting period to meet SDRC 1, some early conclusions have been shared with the Project partners and will help shape the engagement approaches in the trials. These include:

- Segmentation- segmentations assist with targeting campaigns
- Education- customers need to understand how they can reduce/shift their energy consumption
- Messenger- parties delivering messages need to be viewed as both trustworthy and expert
- Incentives- financial incentives can be effective but size and sustainability can have drawbacks, some non-financial incentives proven just as powerful
- Customer commitments- settings goals and targets can be effective to achieve long-term change but often need strong incentives to give them meaning
- Negative messaging- a delicate balance needs to be struck between using negative terms such as 'waste' or 'loss' whilst also making customers feel good about themselves

A key part of the approach to capturing learning, specifically tacit and informal learning ahead of formal documents being produced, is to use 'Learning Moments' at the start of meetings. This requires all partners and suppliers to reflect on delivery of the process of delivering the Project so far and provide input on what they have learnt. Through the Project Partner Review Board meetings a number of areas have been identified where partners have found themselves making decisions/realising implications in relation to delivery and so whilst these are detailed in section 6.2, a summary is provided below:

- Sharing learning- other DNOs willing to travel from around GB to capture and disseminate learning

- Data handling- a central data system required for all partners to access/contribute to
- Knowledge & Dissemination- need to consider language style used in dissemination
- Trial design- need to design for replicability
- Community Coaching trial- consider areas with existing network issues
- Business case- requires more detailed analysis
- Customer engagement report- influencing detailed trial design
- Communications- need to set acceptable level of info trial participants can see

At this early stage in the Project there has been limited opportunity for targeted dissemination of the activities and findings, however there have been several internal and external sessions held in this reporting period.

At the beginning of the year the SSEPD website announced the successful awarding of funding from the LCN Fund, allowing both internal and external stakeholders the opportunity to discover the Project and gain more insight into the objectives. Following this Utility Week's online News section published an article which introduced the Project and covered the objectives and details, raising the profile once more to the external stakeholders.

There have also been several face to face dissemination activities held in this reporting period. The first was the customer engagement workshop held by DNV GL which, as detailed above, aimed to draw out the lessons learned by other projects with regards to engaging customers and changing energy consumption behaviour. Importantly the group's shared learning was documented and provided to all attendees to further their own knowledge and best practice. In May the Project was introduced and discussed in detail with members of SmartGrid GB. SmartGrid GB are, an independent, cross-industry stakeholder group acting as the national champion for smart grid development in Britain, who provide the Department of Energy and Climate Change and Ofgem with an industry view on what kind of smart grid Britain will need and how it might be achieved. Attended by leading manufacturers and industry bodies there was fervent interest in the approach and the design of the trials, with many keen to be updated with progress and developments.

The next reporting period will be filled with key activities:

- Delivery of SDRC 1 report (technically within this reporting period however this report is due before the SDRC 1 deadline)
- Monitoring equipment being delivered
- Initial customer model built
- Tender awarded for network modeling
- Initial network model built
- Create parameters for network investment tool
- Tender awarded for recruitment
- Recruitment of customers begins

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 not identified any potential variances from the bid submission.

## 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 nine risks that fall into this category:

		Inherent								Residual							Inherent	Residual
Risk ref #	Risk Description	Impact						Likelihood	Risk Control/Mitigation Actions	Impact						Likelihood	Score	Score
		Cost	Schedule	Reputation	Learning	Environment	People			Cost	Schedule	Reputation	Learning	Environment	People			
Workpackage 1 - Project Management																		
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	Use of an experienced Market Research Agency to recruit customers, the provision of extra monitoring equipment to allow more customers to be recruited and allow for churn, and ability to use a factorial design to allow statistical analysis should numbers be lower than anticipated	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	4	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	9	4
WP1-6	Lack of availability of suitable learning from the SAVE project	1	1	4	5	1	1	2	Regular reviews of learning to date. Structured capture process, Clear reporting targets	1	1	4	1	1	1	2	10	8
WP1-2	Break up of Partnership	5	5	4	5	1	1	2	MOUs to be replaced by contracts. Letters of support to project from Senior Company Representatives	3	3	4	2	1	1		10	8

Workpackage 2 - Customer Model Development Data Analysis and Reporting

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
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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 customer recruitment and will train staff	1	3	3	3	1	1	3	20	9

Workpackage 11 - Community Coaching

WP11-1	Lack of community 'buy in' to the programme	1	1	3	3	1	1	4	Will have support of stakeholder organisations and appreciation of community's pressure points/aspirations	1	1	2	3	1	1	3	12	9
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## 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 June 2014) and into the next reporting period (up to December 2014).

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	On target- due to meet submission deadline of 30/06/2014
SDRC 2.1	31/12/2014	Create initial customer model	On target- UoS beginning to plan parameters
SDRC 7.1	31/12/2014	Create initial network model and parameters for tool	On target- tender will be issued in coming months to appoint network modeller

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

SDRC	Due	Description
SDRC 5	30/06/2015	Identify control and trial sample groups
SDRC 6	30/06/2015	Install 80% of optic sensors
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
SDRC 8.7	29/06/2018	Produce data-informed engagement trial report
SDRC 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 Approach to learning capture

The approach to learning capture and dissemination is outlined below:

#### a. Capture of structured learning

Structured learning- tangible data or findings related to the Project's learning objectives- will be generated by the trials. Project Partners and suppliers will dedicate resource to the design, monitoring, interpretation and refinement of trial designs in a bid to generate and capture structured learning. Reporting on the findings of the trials will be the main source of structured learning, typically in the form of SDRC reports.

#### b. Capture of unstructured learning

Unstructured learning- unstructured, "how to", Business As Usual relevant and tacit learning- will be created during the delivery of the Project. It will be drawn out by the Project team reflecting on what they have experienced through the process of delivering the Project via a combination of "lessons learned reviews" (LLR), held at the end of milestones or an activity/phase or even ad-hoc, and "learning moments" (LM), held at regular project meetings and reviewed at the Project Partner Review Board.

#### c. Dissemination of learning

It is acknowledged that different types of stakeholder will have different interests in the learning generated by the Project and that dissemination is most effective when the messages and methods are tailored to the audiences' needs. In addition to traditional dissemination the Project will utilise

integration activities which will enable the practical application of learning captured by the Project by stakeholders of all types.

## 6.2 Learning Moments

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

<p><b>Sharing learning</b></p> <p>When setting up customer engagement “lessons learnt” workshop it was found that the Project should not be afraid to ask Ofgem to attend (there was a potential concern that having the regulator in the room would stifle conversation – this was clearly demonstrated to not be the case!). It was also found that attendees were willing to travel from across GB to share learning, dispelling assumptions that there wasn't enough appetite to travel several hours to the session. Discussions with attendees revealed the motivation was that the session was a useful way for them to also to capture and disseminate learning, so future events should focus on mutual beneficial sharing of learning rather than purely dictating or drawing out information.</p>
<p><b>Data handling</b></p> <p>Collaborative working would need a system for storing project information that all partners can access and contribute to. It was originally envisaged that sharing of files and other content via email would be sufficient, although with the large number of recipients it can place a strain on email servers and make it difficult for partners to update ad-hoc and share with Project team once edited, including adding tacit learning during research/delivery. University of Southampton have experience using collaborative systems and investigations are taking place to establish if there is a suitable system for the Project to use.</p>
<p><b>Knowledge &amp; Dissemination</b></p> <p>Knowledge produced in the Project is best captured at the time by creating a log for all documents/learning moments to be captured in, as opposed to waiting for SDRC reports to record details. Discussions around disseminating information about the Project led to concerns that customers involved in the trials may discover information that may affect their behaviour, so raised a need to think carefully about how we will publish information.</p>
<p><b>Trial design</b></p> <p>When reviewing the methods being trialled and the range of additional options that could benefit the energy efficiency trials it was decided that there is a strong need to structure the trials for replicability, and allow other organisations to trial these additional options and produce further research.</p>
<p><b>Community Coaching trial</b></p> <p>Need to consider whether to look at areas where existing network capacity issues or not as may influence impact if customers already experiencing issues, and may impact replicability</p>
<p><b>Customer engagement report</b></p> <p>Initial findings from report on previous projects' learning has influences on trial design and approach</p>

to engagement in the trials, so need to decide on a strategy soon. Partners decided that having a range of options presented and then selecting and refining approach from those as we progress throughout project is best

### **Communications**

Found that the Project needs to decide how the communications will be used and what details of the Project we share with different stakeholders, as industry partners will have different interests from that of academia and will need to be different/potentially restricted for trial participants to avoid unnecessarily affecting the research

## **6.3 Dissemination Activities**

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

<b>Leading Partner</b>	<b>Date(s)</b>	<b>Description</b>
SEPD	16/01/2014	<b>SSEPD website press release</b> Press release posted on SSEPD website highlighting successful awarding of funding from LCN Fund and stating project overview and objectives
DNV GL	27/01/2014	<b>Customer engagement “Lessons Learnt” workshop</b> Workshop discussing the Project and its objectives, and seeking insight from other projects on best practice methods of engaging customers. Document containing insights shared with all participants
Maingate	29/01/2014	<b>Utility Week press article</b> Article presented in Utility Week’s online News section summarising the Project and its objectives
SEPD	15/05/2014	<b>SEPD’s LCNF progress presentation at SmartGrid GB</b> Introduced the SAVE project, its objectives, set up and design as part of SEPD’s LCNF project progress presentation to SmartGrid GB members

## 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
<b>Measure</b>	<b>LEDs</b>	<b>Data informed engagement</b>	<b>DNO rebates</b>	<b>Community Coaching</b>
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

<b>Small Low Voltage Urban reinforcement</b>	<b>LEDs</b>	<b>Data informed engagement</b>	<b>DNO rebates</b>	<b>Community Coaching</b>
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 date<sup>1</sup>. Projected variances are also listed for changes >5%.

	Budget	Expenditure ITD (£K)	Comparison with expected expenditure	Projected Variance (at project conclusion)		
				(£K)	%	#
<b>LABOUR</b>	£2,445,883	£27,158	90%	0	0	
<b>EQUIPMENT</b>	£553,890	-	-	0	0	
<b>CONTRACTORS</b>	£4,735,730	£55,115	86%	0	0	
<b>IT</b>	£753,321	-	-	0	0	
<b>TRAVEL &amp; EXPENSES</b>	£26,400	-	-	0	0	
<b>PAYMENTS TO USERS</b>	£428,302	-	-	0	0	
<b>DECOMMISSIONING</b>	£257,938	-	-	0	0	
<b>OTHER</b>	£442,220	-	-	0	0	

Notes:

No notes associated with expenditure at this time

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<sup>1</sup> 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:

<b>Description</b>	<b>Totals</b> (project inception to May 2014)
Electricity North West Limited	£0.00
Northern Electric Distribution Limited	£74,755.29
Yorkshire Electricity Distribution Plc	£107,268.23
Scottish Hydro Electric Power Distribution Plc	£35,424.90
Southern Electric Power Distribution	£356,879.63
Southern Electric Power Distribution (10% contrib)	£169,256.60
SP Distribution Limited	£94,229.37
SP Manweb Plc	£70,377.33
Eastern Power Networks Plc	£169,281.37
London Power Networks Plc	£0.00
South Eastern Power Networks Plc	£106,587.71
Western Power Distribution (Midlands East) Plc	£373,382.24
Western Power Distribution (Midlands West) Plc	£0.00
Western Power Distribution (South Wales) Plc	£0.00
Western Power Distribution (South West) Plc	£0.00
Interest Received	£0.00
Payments out of account <sup>2</sup>	-£0.00
<b>Balance</b>	<b>£1,475,522.19</b>

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<sup>2</sup> Note: Some SAVE project costs were allocated to the bank account in error. Once identified, these were reversed out.

## 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 Delivery Manager and reviewed by the Project Director before sign-off by the Director of Distribution, who sits on the Board of SEPD.

This report has been corroborated with the monthly minutes of the Project Steering Group<sup>3</sup> 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:	Nigel Bessant	Project Delivery Manager	13 <sup>th</sup> June 2014
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Reviewed by:	Stewart Reid	Project Director	13 <sup>th</sup> June 2014
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Final sign-off:	Stuart Hogarth	Director of Distribution	18 June 2014
	 A. Broadbent	WITH DELEGATED AUTHORITY OF DIRECTOR OF DISTRIBUTION.	

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<sup>3</sup> 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 \*\*\_\*\*\_\*\*\_\*\* from 01/12/2013 to 13/06/2014

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

Date	Narrative	Type	Debit	Credit	Ledger balance
	<b>CLOSING BALANCE</b>				<b>1,557,442.67Cr</b>
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
28/05/2014	UK PN OPERATIONS *****	BAC		53,293.83	1,475,522.19Cr
28/05/2014	UK PN OPERATIONS *****	BAC		84,640.67	1,422,228.36Cr
28/05/2014	NORTHERN ELECTRIC LCNF	BAC		53,634.14	1,337,587.69Cr
28/05/2014	NORTHERN ELECTRIC LCNF	BAC		37,377.66	1,283,953.55Cr
28/05/2014	SOUTHERN ELECTRI SOUTHERN ELECTRI	EBP		178,439.84	1,246,575.89Cr
28/05/2014	SCOTTISH HYDRO-E SCOTTISH HYDRO-E	EBP		17,712.45	1,068,136.05Cr
28/05/2014	SOUTHERN ELECTRI SOUTHERN ELECTRI	EBP		84,628.34	1,050,423.60Cr
28/05/2014	R B S-SP MANWEB	BAC		28,584.58	965,795.26Cr
28/05/2014	R B S-SP DISTRIBUT	BAC		47,114.71	937,210.68Cr
27/05/2014	SOUTHERN ELECTRI SAVE COSTS	EBP	15,683.29		890,095.97Cr
27/05/2014	/RFB/WPD GROUP ***** WESTERN POWER DI STRIBUTION (SW)P CHAPS TFR	CHP		183,119.08	905,779.26Cr
30/04/2014	SOUTHERN ELECTRI SAVE COSTS	EBP	66,237.19		722,660.18Cr
28/04/2014	NORTHERN ELECTRIC LCNF	BAC		53,634.09	788,897.37Cr
28/04/2014	NORTHERN ELECTRIC LCNF	BAC		37,377.63	735,263.28Cr
28/04/2014	SOUTHERN ELECTRI SOUTHERN ELECTRI	EBP		178,439.79	697,885.65Cr
28/04/2014	SOUTHERN ELECTRI SOUTHERN ELECTRI	EBP		84,628.26	519,445.86Cr
28/04/2014	SCOTTISH HYDRO-E SAVE SHEPD DNO	EBP		17,712.45	434,817.60Cr
28/04/2014	/RFB/WPD EAST MI ***** WESTERN PWR DIST R (EAST MDLND) CHAPS TFR	CHP		7,143.85	417,105.15Cr
28/04/2014	R B S-SP MANWEB	BAC		41,792.75	409,961.30Cr
28/04/2014	R B S-SP DISTRIBUT	BAC		47,114.66	368,168.55Cr
	<b>BALANCE BROUGHT FORWARD</b>				<b>321,053.89Cr</b>

Date	Narrative	Type	Debit	Credit	Ledger balance
	<b>BALANCE CARRIED FORWARD</b>				<b>321,053.89Cr</b>
25/04/2014	/RFB/WRD GROUP ***** WESTERN POWER DI STRIBUTION (SW)P CHAPS TFR	CHP		183,119.31	321,053.89Cr
22/04/2014	SCOTTISH HYDRO-E SCOTTISH HYDRO-E	EBP		84,640.70	137,934.58Cr
22/04/2014	SCOTTISH HYDRO-E SCOTTISH HYDRO-E	EBP		53,293.88	53,293.88Cr
	<b>OPENING BALANCE</b>				<b>0.00Cr</b>
<b>Totals</b>			<b>81,920.48</b>	<b>1,639,363.15</b>	