

**Annual Conference:  
Metering Network Presentations:  
Towards a Smart Skilled Workforce**



**Steve Collier**

**Business  
Development  
Manager**

**09 March 2011**

Led by:

energy&utilityskills

ABB | Alstom Power | Balfour Beatty Utility Solutions | Carillion Utility Services |  
CE Electric UK | Enterprise Power Services | E.ON UK | Freedom Group | Mainstream  
Renewable Power | Morgan Sindall | Morrison Utility Services | National Grid | Scottish &  
Southern Energy | Scottish Power | Siemens | UK Power Networks

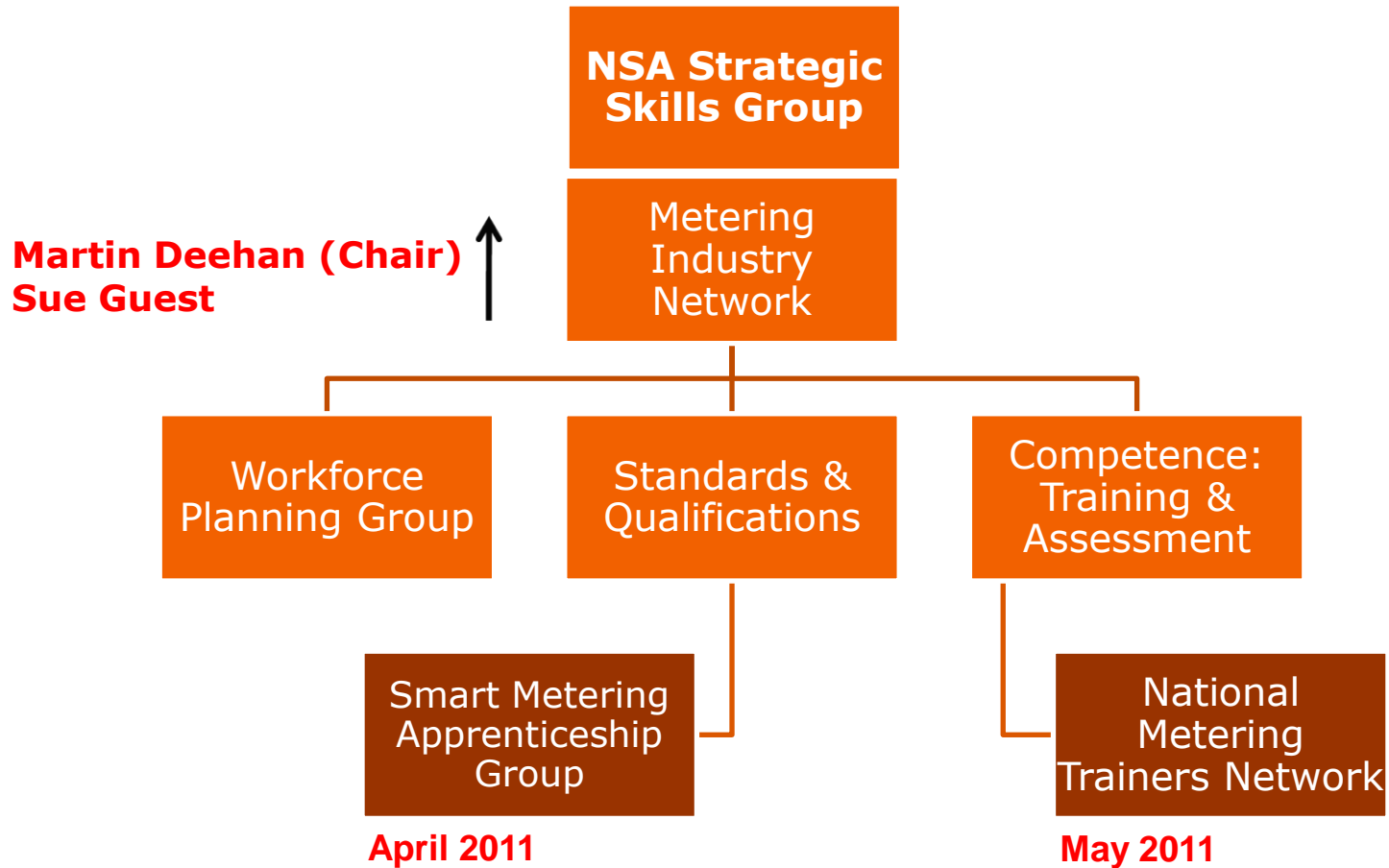
# Smart Metering Skills Presentation

- Workforce Planning for Smart Rollout
- NSAP Smart Metering Approved Provider
- New Dual Fuel Qualification
- National Assessment Specification (Power)
- NSAP Smart Gas Developments
- NSAP Accreditation Scheme via SMICoP



# NSAP Metering Industry Network:

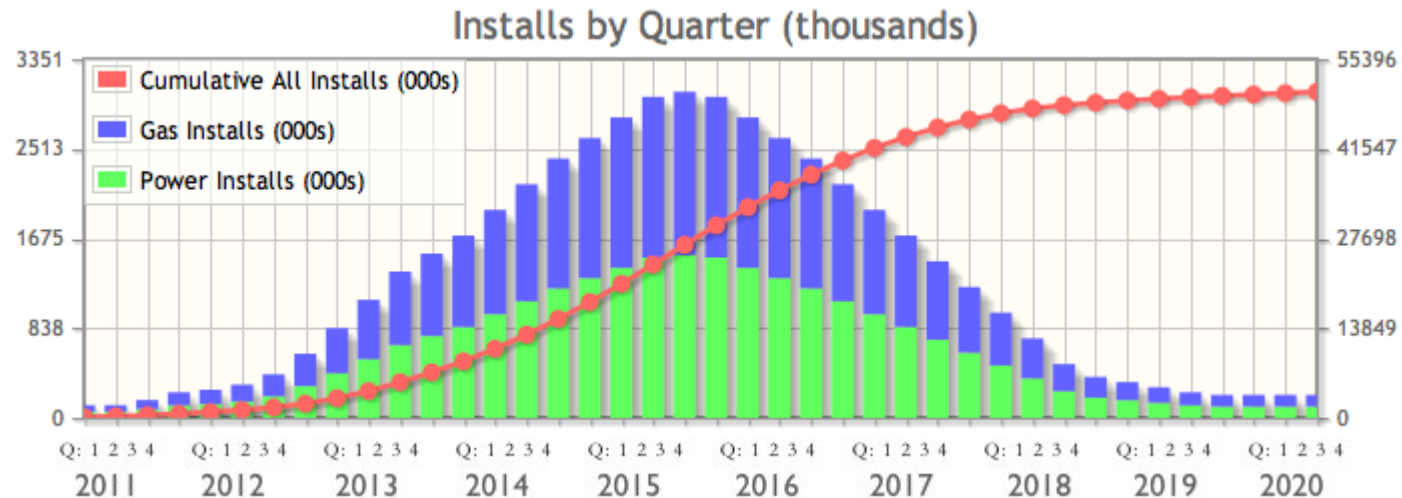
## Subgroup Structures:



# Smart Metering Workforce Planning

## Update: 2020 Growth Scenario 1

	2011	2012	2013	2014	2015	
Up-skill	70	241	701	672	410	
Apprentice	30	120	550	323	270	
Adult trainee	30	120	550	323	270	
Semi-comp	23	120	379	354	294	
Add-fuel	90	90	90	90	90	
<b>Total</b>	<b>243</b>	<b>691</b>	<b>2270</b>	<b>1762</b>	<b>1334</b>	<b>6300</b>

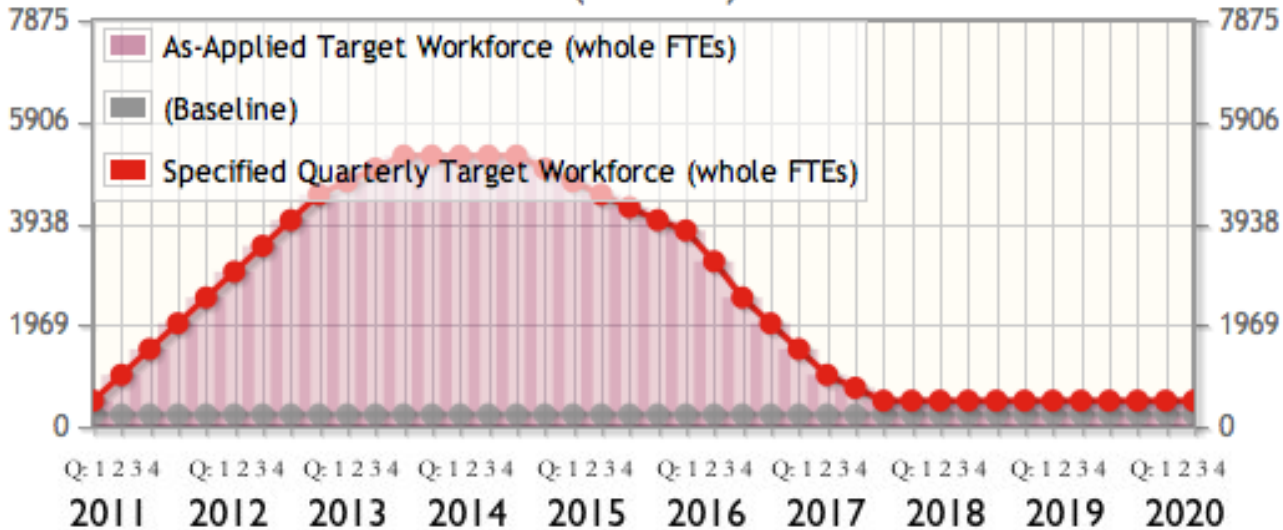


A steady ramping up and then falling off of activity over that period (normal distribution curve) with recruitment planned to match

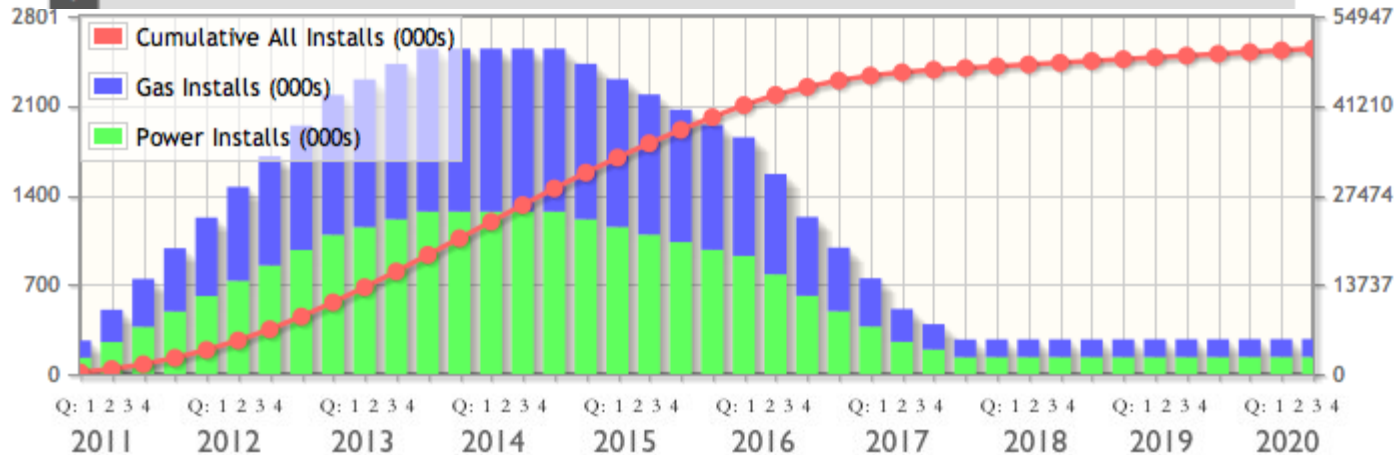
Results in peak workforce of **6300**

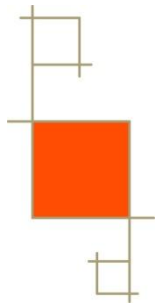
# Alternative 2017 Scenario – Front Loaded

Target Workforce details chart: Dual Fuel Meter Operative (SMART)



Q1	500	2500	4500	5250	5000	4000	2000	500	500	500
Q2	1000	3000	4750	5250	4750	3800	1500	500	500	500
Q3	1500	3500	5000	5250	4500	3200	1000	500	500	500
Q4	2000	4000	5250	5250	4250	2500	750	500	500	500





# Smart Metering Workforce Planning

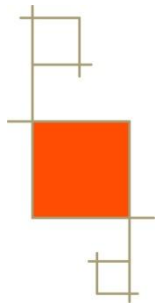
## Growth Scenarios (Continued)

These Assumptions:

- All installers will be dual fuel
- There are 50 million meter installations required
- A dual fuel operator could make 4 house calls in a day, in effect changing 8 meters

The sooner we can start recruiting and training, the smaller the overall workforce numbers required. This will cut down on costs associated with recruitment (e.g. advertising, assessment centres etc) and overall training costs (although it will require greater investment early on) *BUT...* can the Training infrastructure cope?

The pattern of Installation activity can have quite an impact on overall number of workers required (in the NSAP scenarios: in excess of 1000) – hence we need the employers to start disclosing this information so we can more accurately forecast training provision requirement



# NSAP Smart Metering Approved Provider

## Rigorous Quality Assurance Scheme:

<b>Pilot: Jan – Mar</b>	<b>EON UK</b>	<b>(Dual Fuel)</b>
	<b>British Gas</b>	<b>(Dual Fuel)</b>
	<b>Enterprise</b>	<b>(Electricity)</b>

- **14 Regular Criteria Categories**
- **6 Electrically Specific Categories**

## **Includes**

- **National Assessment Specification**
- **Visit by Experienced Power Sector Verifier**
- **Submissions Scrutinised by Expert Panel**
- **Must Demonstrate Employer links (Work experience)**
- **Adhere to Installation Code of Practice  
(eg. Emergency Response Categories)**
- **Trainer & Assessor Capability**

# AMR/SMART QUALIFICATION DEVELOPMENT:

Submissions now with OFQUAL



Dual Fuel, Power and Gas



Dual Fuel, Power and Gas



6 weeks to receive Qualification Accreditation Codes = 01 April 11

Scotland Versions under consideration by SQA

## Proposed Level 2 Smart Metering Diploma: Dual Fuel

Working Safely in the Energy & Utilities Sector

Working Effectively & Efficiently in the Energy & Utilities Sector

Using & Communicating Technical Information in the Energy & Utilities Sector

Delivering Customer Service When Working within the Energy & Utilities Sector

Install and Commission Communication systems and media in Smart Metering

Install and Commission Gas Smart Meter and Regulator (2.5 to 6.0m<sup>3</sup>/hr)

Gas Smart Meter tightness testing and direct purging – IGE/UP/1B (low pressure only)

Core Gas Safety Knowledge for Smart Metering

Install Single Phase Meter and Associated Equipment (New Connection)

Change Single Phase Meter and Associated Equipment



# National Assessment Specification(Power)

- 3000+ Existing Gas & Electricity Installers
- 6000+ New Installers
- Polarity/Electricity Awareness
- Dangerous Cut-outs
- Electrotechnical Equipment
- 100Amp Isolator Issue
- Emergency Response Reporting
- Communications



The National  
**Skills Academy**  
**POWER**



# NSAP Smart Gas Developments

- 3 New Gas Modules
- Working with Gas Safe)
- Working with ENA SMOG (Gas issues)
- Evidence Required of Comms Upskilling
- NSAP Smart Metering: Quantify Gas Provision
- Skills Database to Verify with Gas Safe Database

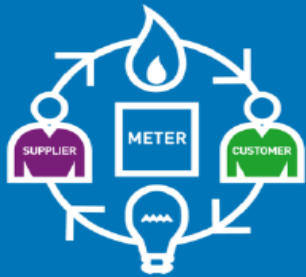


November 2010

SRSM & Beyond Project

Smart Metering

## Installation Code of Practice



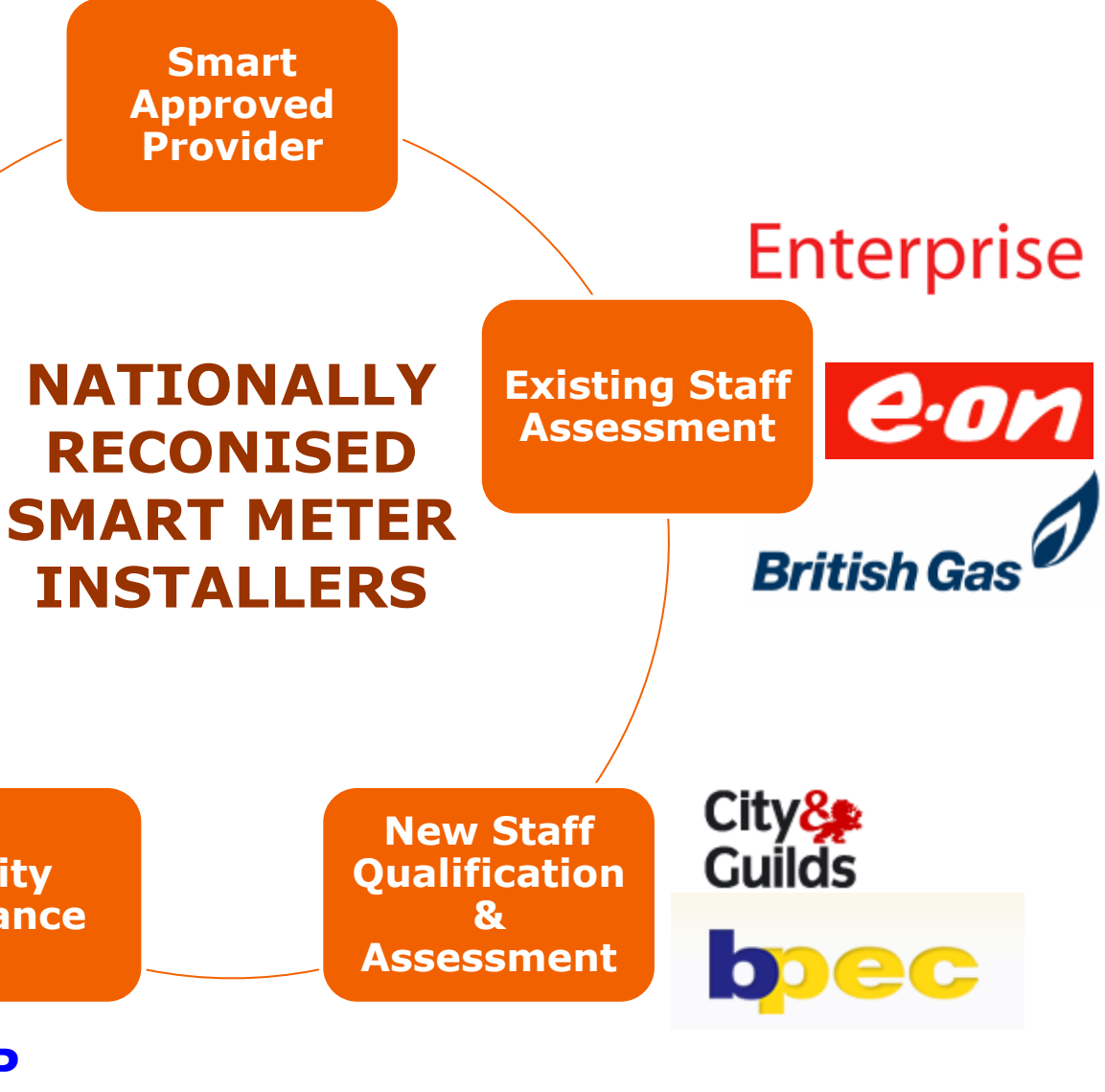
### Overview

This document provides the first draft of the content of the Energy Retail Association's Installation Code of Practice as referenced in the consultation papers published on July 27 2010.

1.4.1.1 Appropriate training and accreditation of installers (page 7)

3.2 Relevant Accreditation:  
National Skills Academy for Power (page 8)

3.7.1 Members will adopt a standard accreditation for smart metering installers taking into account the knowledge and skills necessary to fulfil the role under the National Skills Academy for Power scheme (page 10)





## **Dates for Your Diary:**

- **Weds 06 April**      **Main Metering Network Meeting**
- **Thurs 13 April**      **Dual Fuel Apprenticeship Subgroup**
- **Date TBC May**      **Metering Trainer/Assessor subgroup**
  
- **Special Thanks to our latest 2010/11 Subscribing Metering Members:**

**G4S  
B Global  
Lowri Beck  
Vital Power  
EDF Energy (Metering)**



**END OF PRESENTATION**

**Steve Collier**  
**Business Development Manager**  
**(Smart Metering)**