

CHPQA-Recent Changes and Update

Mahmoud Abu-Ebid

CHPQA Programme Manager

Talk Coverage

- Quick Review
- Status Report
- Latest Developments and Changes to:
 - Heat metering for schemes with $TPC < 2MWe$
 - Power efficiency threshold for Steam Turbine/Engine based Schemes
 - QPO analysis for schemes with $TPC < 2MWe$
 - CHPQA formulas to comply with the EU CHP Directive



Benefits for Good Quality CHP



- CCL Exemption on **both fuel input and electricity output**
- Business Rates Exception
- Access to Enhanced Capital Allowance
- ROCs for waste-to-energy CHP (*New Benefit*)
- Oil Duty relief (*New Benefit*)
- Carbon Allocation under EU-ETS Phase II? (*under consideration*)



Roles and Responsibilities

- Defra
- Other Government Departments
 - HM Revenue & Customs
 - VOA
 - DTI
- CHPQA Administrator
- Ofgem and Ofreg- for issuing LECs

Current Status

Certified Schemes in 2002-2005

	Number of Schemes	CHP _{TPC} (MWe)	CHP _{QPC} (MWe)	CHP _{TPO} (MWh)	CHP _{QPO} (MWh)	CHP _{TFI} (MWh)	CHP _{QFI} (MWh)
Certified in 2002	907	8,231.3	4,857.3 (59%)	49,278,284	28,294,280 (58%)	166,445,121	155,217,190 (93%)
Certified in 2003	897	8,366.7	5,071.6 (60.6%)	49,833,175	29,548,495 (59.3%)	166,868,404	158,689,881 (95.1%)
Certified in 2004	899	8,321.1	5,056.4 (60.8%)	51,286,065	29,685,191 (57.9%)	168,756,360	161,252,757 (95.6%)
Certified in 2005	895	8,836.2	5,648.4 (63.9%)	50,675,520	29,120,479 (57.5%)	167,949,949	161,477,315 (96.1%)

LECs Worth about
£125 million/year

Latest Developments & Changes

- **Heat Monitoring Requirements** (by Dec. 2005 at the latest)
- **Steam Turbines power efficiency threshold concession** (changed from 15 to 20%)
- **Exemption from QPO analysis** (for Schemes with TPC < 2MWe expired 1 April 2005).



Heat Monitoring Requirement

- The CHPQA Standard allowed RPs to estimate the amount of useful heat from the CHP, until end of March 2004
- from 1 April 2004, all Schemes were required to monitor the useful heat supplied (*except Schemes <2MWe with no heat rejection facility*).
- Deadline for compliance extended by Defra to 30 June 2005.
- For guidance on how to monitor heat see CHPQA GN13 (section 13.11) and GN16 (sections 16.12-16.19).



Heat monitoring system installed before 30 June 2005?

- Yes... These schemes are fully compliant
- The 2006 submission should be based on:
 - at least 6 months (July-Dec 05) of actual data
 - 6 months (Jan-June 05) of estimated data (extrapolated from actual data).



Heat monitoring installed between 1 July and 30 Dec. 2005?

- The 2006 submission should be based on:
 - Actual data (?-Dec 05)
 - Estimates for the rest of the year (extrapolated from actual data).
 - This should be based on the lower end of the heat demands range for this period.
- Need to provide details of heat analysis



Heat monitoring not yet installed?

- These schemes are non-compliant.
- The 2006 submission should be based on the lower end of the heat demands range for the whole of 2005.
- Will receive a CHPQA Certificate for 2005 reconciliation purposes
- The Secretary of State Certificate will be withdrawn by Defra with effect from 1/1/2006
- You will lose any entitlement for CCL benefits from 1 Jan 2006
- Would need to be re-certified once a heat monitoring system is installed.
- Would also need to obtain new SOS certificate before start claiming CCL exemption.



Steam Turbine/engine schemes – Concession

- For existing steam turbine/engine based Schemes, the power generation efficiency criterion was relaxed, from 20% to 15%, until 1st April 2005
- In 2004, out of 24 ST Schemes, only 3 achieved power eff. > 15%. Their fuel scaled back.
- From 1st April 2005, the power efficiency threshold for all schemes is 20%.
- The next submission should be based on normal QI definition applicable to size of Scheme and threshold power efficiency of 20%



Steam Turbine/engine based schemes – 2006 submission

- For next submission use paper forms not electronic submission system.
- In carrying out the validation of your submission, CHPQA will base your Certificate on:
 - 3 months (Jan.-March) using the power efficiency threshold of 15% and QI formula for ST, and
 - 9 months (April-Dec 05) using the power efficiency threshold of 20% and on the normal QI definition applicable to the size of the scheme.

[QI Formula](#)

[CHP04](#)

[Certificate](#)

QPO analysis for Schemes with $TPC < 2MWe$ - background

- Schemes with $TPC < 2 MWe$ using the short form (F4s), only required to calculate the power efficiency and scale back fuel if power efficiency $< 20\%$.
- Not required to calculate QPO
- CHPQA carry out QI analysis, if less than 100, we calculate QPO and TPC (only used for UK statistics). A statement “Not Required” appears on the [CHPQA Certificate](#).
- In these cases schemes still receive full exemption on power out put ($QPO = TPO$)
- This concession expired on 1st April 2005.



QPO analysis from April 2005 for schemes with TPC<2MWe

- If a Scheme achieves a QI < 100, would have to calculate QPO from 1st April 2005. *{CHPQA Electronic forms have been modified}*
- As this change came into effect part way through the year, it has been applied in proportion for 2005 only, using the formula:

$$\{QPO_{corrected} = 0.25 \times TPO + 0.75 \times QPO_{calculated}\}$$

- With $QPO_{corrected}$ being shown on your CHPQA Certificate.
- If $QPO < TPO$ operators would have to pay CCL on the difference

Impact of EU-Directive on CHPQA

*Full presentation in the
afternoon.....*



Where do you go from here?

- All CHPQA Certificates issued in 2005 have now expired
- SOS certificates are open ended
- entitling Schemes to continue claiming exemption, provided
- that a valid CHPQA certificate is presented to Defra by the end of June 2006



Where do you go from here?(cont.)

- New applications should be submitted to the CHPQA Administrator by **28 March 2006**
- Based on 2005 actual data:
 - Electricity generated
 - Heat utilised (actual)
 - Fuel used
- If all is in order new certificate will be issued no later than **middle of June 2006**

Electronic CHPQA Submission

- Remember you can send in your CHPQA Forms via the internet
 - It is secure – it uses SSL encryption
 - Submitting information is easier and faster
 - Forms submission and verifications processes are improved

chip **QA**

Help & Advice



defra
Department for Environment
Food and Rural Affairs

Finally

- ✓ Submit your CHPQA Forms before end of March 2006
- ✓ We endeavour to issue you new CHPQA certificate by the middle of June.
- ✓ You then have to inform Defra, by the end of June 2006, to maintain the validity of your SOS certificate
- ✓ If you have CHP and have not yet applied to the CHPQA programme, act now
- ✓ You should now have sorted out the heat monitoring issue. If not contact the CHPQA Administrator **urgently**
- ✓ For ST schemes, please use paper forms

