## The U.S. Department of Energy Industrial Assessment Centers

# **Database Coding Systems**

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<u>Maintained by</u> Michael B Muller <u>mbmuller@caes.rutgers.edu</u>

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### **Database Coding Systems**

#### **Implementation Status**

The database uses a numerical code to represent the status of implementation. The following table provides details to the coding scheme:

| Code | Implementation Status           |   |  |  |  |
|------|---------------------------------|---|--|--|--|
| Ι    | IMPLEMENTED                     | Was completely implemented at the time of the call, or plans<br>were definitely made to complete implementation within 12<br>months of call (not to exceed 24 months from the assessment<br>date) |  |  |  |
| Р    | PENDING                         | <b>G</b> This status is for recommendations with implementation costs of \$10,000 or more. Delay in implementation should be attributable to large capital investment.                            |  |  |  |
| Ν    | NOT IMPLEMENTED                 |   |  |  |  |
| K    | DATA EXCLUDED OR<br>UNAVAILABLE | K status may be assigned ONLY by field managers.  |  |  |  |

#### Figure 1: Implementation Status Codes

- A list of "Pending" implementations will be kept for each center; for each Pending implementation, a yearly report will be required from the center until the implementation can be identified as either Implemented or Not Implemented.
- If, after 3 years, a Pending implementation cannot be identified as Implemented, it shall be changed to Not Implemented.
- Pending implementations will not be counted when determining which implementations are Implemented and Not Implemented

#### **Production Units (Produnit) Coding**

The database uses a numerical code to represent units of production. In some industries such units are not very informative and so in many cases this item is left out. The following table provides details to the coding scheme.

| Code                                       | Units            |  |
|--|------------------|--|
| 0  | Not Available    |  |
| 1  | Pieces           |  |
| 2  | Pounds           |  |
| 3  | Tons             |  |
| 4  | BBL              |  |
| 5  | Thousand Gallons |  |
| 6 Thousand Feet or Thousand Square<br>Feet |                  |  |
| 7  | Bushels          |  |

Figure 2: Production Unit Codes

#### **Rejection Codes<sup>1</sup>**

When a recommendation is not adopted attempts are made to determine the reasons surrounding the negative decision. The database uses a numerical code to represent the reason for rejection. The following table provides details to the coding scheme.

| Code | Reason  |  |  |
|------|---|--|--|
| 1    | Unsuitable return on investment                     |  |  |
| 2    | Too expensive initially                             |  |  |
| 3    | Cash flow prevents implementation                   |  |  |
| 4    | Unacceptable operating changes                      |  |  |
| 5    | Impractical   |  |  |
| 6    | Process and/or equipment changes                    |  |  |
| 7    | Facility change                                     |  |  |
| 8    | Personnel changes                                   |  |  |
| 9    | Production schedule changes                         |  |  |
| 10   | Material restrictions                               |  |  |
| 11   | 11 Bureaucratic restrictions                        |  |  |
| 12   | To be implemented after 2 years <sup>2</sup>        |  |  |
| 13   | Considering   |  |  |
| 14   | Lack of staff for analysis and/or implementation    |  |  |
| 15   | Not worthwhile                                      |  |  |
| 16   | Disagree  |  |  |
| 17   | Risk or inconvenience to personnel                  |  |  |
| 18   | Suspected risk or problem with equipment or product |  |  |
| 19   | Rejected after implementation failed                |  |  |
| 20   | Unknown   |  |  |
| 21   | Could not contact plant                             |  |  |
| 22   | Other   |  |  |

Figure 3: Rejection Codes

<sup>&</sup>lt;sup>1</sup> Currently, Rejection Codes are not publicly available due to confidentiality concerns

<sup>&</sup>lt;sup>2</sup> No longer used

#### **Resource Identification Codes**

The database uses a numerical code to represent the various resource streams tracked. The following table provides details to the coding scheme.

| STREAM TYPE     | STREAM                              | CODE            | CONSUMPTION UNITS            |
|-----------------|-------------------------------------|-----------------|------------------------------|
|                 | Electrical Consumption              | EC              | KWH(site)                    |
|                 | Electrical Demand                   | ED              | MMBtu(source) kW-months/year |
|                 | Other Electrical Fees               | EF              | n/a                          |
|                 | Electricity                         | E1 <sup>3</sup> | <del>KWH(site)</del>         |
|                 | Natural Gas                         | E2              | MMBtu                        |
|                 | L.P.G                               | E3              | MMBtu                        |
|                 | #1 Fuel Oil                         | E4              | MMBtu                        |
| ENERGY          | #2 Fuel Oil                         | E5              | MMBtu                        |
|                 | #4 Fuel Oil                         | E6              | MMBtu                        |
|                 | #6 Fuel Oil                         | E7              | MMBtu                        |
|                 | Coal                                | E8              | MMBtu                        |
|                 | Wood                                | E9              | MMBtu                        |
|                 | Paper                               | E10             | MMBtu                        |
|                 | Other Gas                           | E11             | MMBtu                        |
|                 | Other Energy                        | E12             | MMBtu                        |
|                 | Water Disposal                      | W1              | Gallons                      |
|                 | Other Liquid (non-haz)              | W2              | Gallons                      |
|                 | Other Liquid (haz)                  | W3              | Gallons                      |
| WASTE REDUCTION | Solid Waste (non-haz)               | W4              | Pounds                       |
|                 | Solid Waste (haz)                   | W5              | Pounds                       |
|                 | Gaseous Waste                       | W6              | Pounds                       |
|                 | Personnel Changes                   | R1              | n/a                          |
|                 | Administrative Costs                | R2              | n/a                          |
|                 | Primary Raw Material                | R3              | n/a                          |
| RESOURCE COSTS  | Ancillary Material Cost             | R4              | n/a                          |
|                 | Water Consumption                   | R5              | n/a                          |
|                 | One-time Revenue or<br>Avoided Cost | R6              | n/a                          |
|                 | Primary Product                     | P1              | n/a                          |
| PRODUCTION      | By-product Product ion              | P2              | n/a                          |
|                 | Increase in Production              | Р3              | %                            |

Figure 4: Resource Stream Codes

 $<sup>^3</sup>$  E1 was replaced with EC, ED, and EF as of FY 95 (9/30/95).