



*ABERDEEN AREA
INDIAN HEALTH SERVICE*

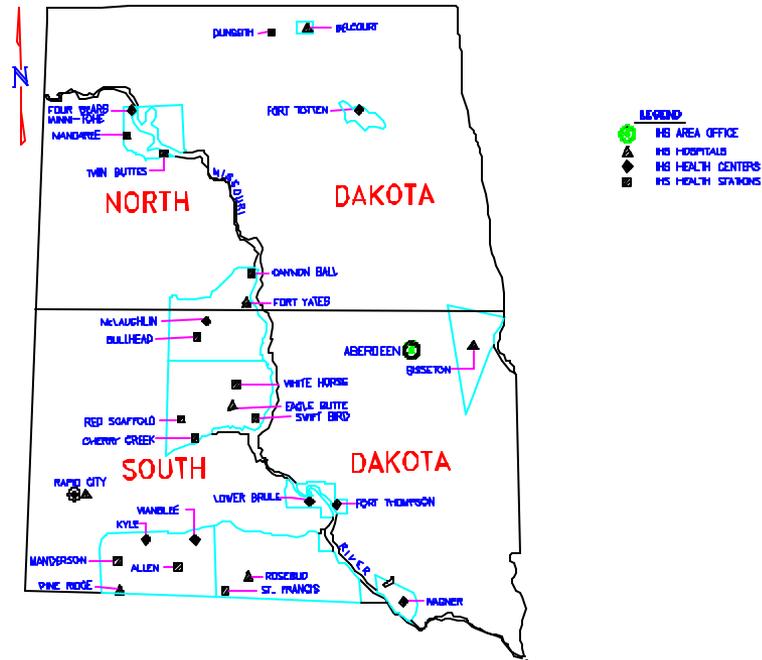
**ENERGY SAVING
PERFORMANCE CONTRACT
(ESPC)**

June 2-5, 2002

www.energy2002.ee.doe.gov



Project Location North and South Dakota



June 2-5, 2002

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Aberdeen Area ESPC

The purpose of this section is to:

- Provide brief overview of the ESPC process.
- Johnson Controls Proposal
- Pre-negotiation Objectives
- Options/Alternatives to ESPC
- Group Questions?



- Reduce building energy use 35% by 2010.
- Demonstrate energy technology(showcases)
- Use innovative financing & contract mechanisms.
- Reduce greenhouse gas emissions 30% below 1990 levels by 2010.



General technology categories:

- Boiler and chiller improvements
- Building automation & energy management control systems
- HVAC
- Lighting improvements
- Electric motors and drivers



Johnson Controls ESPC Proposal

- Control Improvements and Lighting Upgrade
 - Belcourt Hospital
 - Eagle Butte Hospital
 - Pine Ridge Hospital
 - Rapid City Hospital
 - Rosebud Hospital
 - Ft. Yates Hospital
- Lighting Upgrade
 - Minne-Tohe Health Ctr
 - Sisseton Hospital
 - Wagner Health Ctr



Summary

- Conserves energy: 21% reduction overall
- Compliance with EO 13123
- Improved lighting and power quality
- 15 years of improved maintenance
- Removal of hazardous Materials/PCB ballasts



ESPC Pre-Negotiation Objectives

- Term of contract should approach 15 years (25 years maximum allowable)
- Proposed method of measurement and verification must support the modeling methodology.
- Revised sequences of operations will not compromise patient comfort and Hospital/Clinic indoor air quality



2002 ESPC Project Alternatives

- New Construction Project
- New Construction/Design-Build
- Force Account
- Individual Service Contracts
- IDC Construction Contract



- Questions about ESPC?

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APPENDIX

- Detailed summary alternatives

- ESPC Alternatives:
 - New Construction Project
 - New Construction/Design-Build
 - Force Account
 - Individual Service Contracts
 - IDC Construction Contract

- Project Details:
 - Belcourt Hospital
 - Eagle Butte Hospital
 - Rapid City Hospital
 - Pine Ridge Hospital
 - Rosebud Hospital

- Public Law 93-638 Options



ESPC ALTERNATIVE

- New Construction Project
 - Traditional A/E design and construction project
 - Construction start in Fifteen Months.
 - Construction completion in Thirty Months
 - Government Funded Project



ESPC ALTERNATIVE

- New Construction/Design-Build
 - Project using performance specifications
 - Twelve months to award of delivery order.
 - Twelve months of construction.
 - Government funded project.



ESPC ALTERNATIVE

- Force Account
 - Government funded project



ESPC ALTERNATIVE

- Individual Service Contracts
 - Multiple contracts for different areas of North and South Dakota project locations.
 - ES-Seattle technical direction provided to service contractors.
 - Project durations four to five years.
 - Government funded project.



ESPC ALTERNATIVE

- Indefinite Delivery Contract (IDC)/
Construction Services
 - Government funded project
 - Establish IDC for construction services, ten months
 - Prepare specifications for projects, twelve months
 - Construction duration twenty-four months



ESPC PROJECT DETAILS

- Belcourt Hospital
- Eagle Butte Hospital
- Rapid City Hospital
- Pine Ridge Hospital
- Rosebud Hospital



Belcourt, ND

□ Benefits

- Reduce energy use by 10%.
- Energy efficient lighting
 - Improved power quality & color rendering index
- Energy conservation strategies
 - 6 air handling units, boilers & chillers
 - VFD's for AHU 2& 3.
- Maintenance provided by JCI instead of 3 contractors.

□ Estimated energy savings

- ECM 3.1: Energy Mgmt Controls \$ 43,000
- ECM 5.1: Lighting \$ 12,000



Eagle Butte

□ Benefits

- Reduce energy use by 21%
- Energy efficient lighting
 - Improved power quality & color rendering index
 - Eliminate PCB ballasts
- Energy conservation strategies
 - Replacement of existing HVAC controls system with new control system.
- Preventive Maintenance: JCI will continue to provide service.

□ Estimated energy savings

- | | | |
|--------------------------------|----|--------|
| ➤ ECM 3.1 Energy Mgmt Controls | \$ | 19,000 |
| ➤ ECM 5.1 Lighting | \$ | 5,000 |



Rapid City

- **Benefits**
 - Reduce energy use by 11%
 - Energy efficient lighting
 - Improved power quality & color rendering index
 - Eliminate PCB ballast
 - Energy conservation strategies
 - 15 air handling units, boilers & chillers
 - Maintenance provided by facility staff.
- **Estimated annual energy savings**
 - ECM 3.1 Energy Mgmt Controls \$ 26,000
 - ECM 5.1 Lighting \$ 11,000



Pine Ridge

□ Benefits

- Reduce energy use by 24%
- Energy efficient lighting
 - Improved power quality & color rendering index
- Energy conservation strategies
 - 10 air handling units, boilers & chillers
- Preventive Maintenance: Consolidate chiller PM into existing JCI controls contract.

□ Estimated energy savings

- | | |
|--------------------------------|-----------|
| ➤ ECM 3.1 Energy Mgmt Controls | \$ 65,000 |
| ➤ ECM 5.1 Lighting | \$ 17,000 |



Rosebud

- **Benefits**
 - Reduce energy use by 33%
 - Energy efficient lighting
 - Improved power quality & color rendering index
 - Energy conservation strategies
 - 5 air handling units, boilers & chillers
 - Preventive Maintenance: Consolidate chiller PM into new JCI controls contract.
- **Estimated energy savings**
 - ECM 3.1 Energy Mgmt Controls \$ 67,000
 - ECM 5.1 Lighting \$ 18,000



Public Law 93-638 Options

- IHS Pays JCI Cancellation Fee based on the number of years remaining under the contract for payback.

Or
- JCI negotiates contact w/tribe for transfer of contract responsibility from IHS to tribe. IHS Contract modified to delete site from contract.

Or
- The Area establishes the 106(a)(1) amount including the ESPC contract payback, negotiates the ESPC as funds retained by IHS for the remaining years per payback schedule for that site. Once the ESPC contract is fulfilled, the funds retained by IHS can then be released to the tribe in their AFA on a recurring basis.