

**CRSP MC FY 2003  
Rate Adjustment Process**

Public Information Forum

March 19, 2002

*Western Area Power Administration*

**Carol Loftin**

Rates Manager

*CRSP Management Center*

# Rate Adjustment Topics

- SLCA/IP Firm Power
- CRSP Transmission
- Ancillary Services
- Schedule for Rate Adjustment Process

# SLCA/IP Firm Power

- Guidelines for rate setting practices.

# SLCA/IP Firm Power

| <b>Rate Schedule</b> | <b>Effective Dates</b> | <b>Duration</b> |
|----------------------|------------------------|-----------------|
| SLIP-F1              | 10/87 - 9/90           | 35 months       |
| SLIP-F2              | 10/90 - 11/91          | 13 months       |
| SLIP-F3              | 12/91 - 9/92           | 9 months        |
| SLIP-F4              | 10/92 - 11/94          | 25 months       |
| SLIP-F5              | 12/94 - 4/98           | 39 months       |
| SLIP-F6              | 4/98 - 3/03            | 54 months       |

**Paul Stuart**

SLCA/IP Firm Power

*Rates Team*

# Salt Lake City Area Integrated Projects

|                                  | <u>% Energy</u> |
|----------------------------------|-----------------|
| CRSP                             | 95.8            |
| <i>Other Integrated Projects</i> |                 |
| Dolores                          | 0.7             |
| Seedskadee                       | 1.0             |
| Collbran                         | 0.7             |
| Rio Grande                       | <u>1.8</u>      |
|                                  | 100             |

# Power Repayment Study

- Prepared yearly for each project.
- Documents historical financial data.
- Provides status of project repayment.
- Projects revenue requirements & rates.
- SLCA/IP PRS.



# Power Repayment Study

| Power Repayment Study (PRS) Format |             |         |          |                                     |                                      |                                     |                |
|------------------------------------|-------------|---------|----------|-------------------------------------|--------------------------------------|-------------------------------------|----------------|
|                                    |             |         |          |                                     | Repayment                            |                                     |                |
| Years                              | Power Sales | Revenue | Expenses | Net Revenue Available for Repayment | Investment with higher interest rate | Investment with lower interest rate | Other Payments |
|                                    |             |         |          |                                     |                                      |                                     |                |
|                                    |             |         |          |                                     |                                      |                                     |                |
| Historic Data                      |             |         |          |                                     |                                      |                                     |                |
| Subtotals                          |             |         |          |                                     |                                      |                                     |                |
| Future Data                        |             |         |          |                                     |                                      |                                     |                |
| Grand Total                        |             |         |          |                                     |                                      |                                     |                |

# Firm Power Rate Formula

## Composite Rate

Future revenue requirements for firm power  
divided by  
Expected energy sales

# SLCA/IP Firm Power

## Current Firm Power Rate

|  |             | FY 1997 PRS  |
|--|-------------|--------------|
| Item                                     | Unit        | Current Rate |
| 1998 CB                                  |             |              |
| <b>Rate Setting Period:</b>              |             |              |
| Beginning year                           | FY          | 1998         |
| Pinchpoint year                          | FY          | 2057         |
| Number of rate setting years             | Years       | 60           |
| <b>Revenue Requirements:</b>             |             |              |
| <i>Annual expenses</i>                   | 1,000       | \$62,708     |
| <i>Annual principal payments</i>         | 1,000       | \$65,614     |
| <b>Total Annual Revenue Requirements</b> | 1,000       | \$128,322    |
| <b>(Less Offsetting Annual Revenue:)</b> | 1,000       | (\$16,731)   |
| <b>Net Annual Revenue Requirements</b>   | 1,000       | \$111,591    |
| <b>Energy Sales</b>                      | MWh         | 6,352,718    |
| <b>Composite Rate</b>                    | mills/kWh   | 17.57        |
| <b>Billing Rates:</b>                    |             |              |
| Energy Rate                              | mills/kWh   | 8.1          |
| Capacity Rate (per month)                | \$/kW-month | 3.44         |

# Current SLCA/IP Firm Power Rate

- Current firm power rate (SLIP-F6).
  - Effective: April 1, 1998.
  - Energy: 8.10 mills/kWh.
  - Capacity: \$3.44 kW/month.
  - Composite Rate: 17.57 mills/kWh.
  - Expires: March 30, 2003.

# Proposed SLCA/IP Firm Power Rate

- Proposal includes a Base Rate and a Purchase Adder Rate (PAR) formula.
  - Base Rate
    - OM&R, interest, principal, and irrigation aid.
  - PAR
    - Purchased power (recalculated after 2 years).
- Effective: October 1, 2002.

# SLCA/IP Firm Power

## Reasons for the Rate Adjustment

- What has changed since April 1998?
- Refer to SLCA/IP Rate Comparison Table.

# SLCA/IP Rate Comparisons

## Rate Setting Period

### Current Rate PRS v. Proposed Base Rate PRS

|      |      | FY 1997 PRS  | FY 2000 PRS    | Change from  |         |
|------|------|--------------|----------------|--------------|---------|
|      |      | Current Rate | Proposed Base  | Current Rate |         |
| Item | Unit | 1998 CB      | 2003 Work Plan | Amount       | Percent |

| Rate Setting Period:         |       |      |      |  |  |
|------------------------------|-------|------|------|--|--|
| Beginning year               | FY    | 1998 | 2003 |  |  |
| Pinchpoint year              | FY    | 2057 | 2060 |  |  |
| Number of rate setting years | Years | 60   | 58   |  |  |

# SLCA/IP Rate Comparisons

## Annual O&M

### Current Rate PRS v. Proposed Base Rate PRS

|                                     |       | FY 1997 PRS  | FY 2000 PRS    | Change from  |         |
|-------------------------------------|-------|--------------|----------------|--------------|---------|
|                                     |       | Current Rate | Proposed Base  | Current Rate |         |
| Item                                | Unit  | 1998 CB      | 2003 Work Plan | Amount       | Percent |
| <b>Annual Revenue Requirements:</b> |       |              |                |              |         |
| <b><u>Expenses</u></b>              |       |              |                |              |         |
| <b>Operation and Maintenance:</b>   |       |              |                |              |         |
| Western                             | 1,000 | \$21,190     | \$37,176       | \$15,986     | 75%     |
| Reclamation                         | 1,000 | \$14,178     | \$23,976       | \$9,798      | 69%     |
| Total O&M                           | 1,000 | \$35,368     | \$61,152       | \$25,784     | 73%     |



# Western's Budgeted O&M

## Reasons for \$16 million Increase

- Costs underestimated in FY 1998 CB--\$8.1 million
- FERC Order 889 and Merchant Function--\$3.9 million
- Cost of living increases--\$4.0 million

# Reclamation's Budgeted O&M

## Reasons for \$9.8 million Increase

- Indexing--\$4.4 million
- Federal Benefits--\$2.5 million
- Allocations to power--\$1.1 million
- Maintenance estimates enhanced--\$1.8 million

# SLCA/IP Rate Comparisons

## Other Expenses

### Current Rate PRS v. Proposed Base Rate PRS

|                                  |       | FY 1997 PRS  | FY 2000 PRS    | Change from  |         |
|----------------------------------|-------|--------------|----------------|--------------|---------|
|                                  |       | Current Rate | Proposed Base  | Current Rate |         |
| Item                             | Unit  | 1998 CB      | 2003 Work Plan | Amount       | Percent |
| Purchased Power                  | 1,000 | \$5,452      | \$0            | (\$5,452)    |         |
| Transmission                     | 1,000 | \$7,523      | \$8,104        | \$581        | 8%      |
| Integrated Projects requirements | 1,000 | \$7,887      | \$4,786        | (\$3,101)    | -39%    |
| Interest                         | 1,000 | \$4,934      | \$2,173        | (\$2,761)    | -56%    |
| Other                            | 1,000 | \$1,544      | \$3,034        | \$1,490      | 97%     |
| <b>Total Expenses</b>            | 1,000 | \$62,708     | \$79,249       | \$16,541     | 26%     |

# SLCA/IP Rate Comparisons

## Repayment Obligations

### Current Rate PRS v. Proposed Base Rate PRS

|                                  |       | FY 1997 PRS  | FY 2000 PRS    | <i>Change from Current Rate</i> |         |
|----------------------------------|-------|--------------|----------------|---------------------------------|---------|
|                                  |       | Current Rate | Proposed Base  |                                 |         |
| Item                             | Unit  | 1998 CB      | 2003 Work Plan | Amount                          | Percent |
| <i><u>Principal payments</u></i> |       |              |                |                                 |         |
| Replacements                     | 1,000 | \$11,846     | \$14,289       | \$2,443                         | 21%     |
| Original Project and Additions   | 1,000 | \$8,198      | \$5,000        | (\$3,198)                       | -39%    |
| Irrigation                       | 1,000 | \$45,570     | \$46,060       | \$490                           | 1%      |
| <i>Total principal payments</i>  | 1,000 | \$65,614     | \$65,349       | (\$265)                         | 0%      |

# SLCA/IP Rate Comparisons

## Offsetting Revenues

### Current Rate PRS v. Proposed Base Rate PRS

|  |       | FY 1997 PRS     | FY 2000 PRS     | Change from     |            |
|--|-------|-----------------|-----------------|-----------------|------------|
|  |       | Current Rate    | Proposed Base   | Current Rate    |            |
| Item                                     | Unit  | 1998 CB         | 2003 Work Plan  | Amount          | Percent    |
| <b>(Less Offsetting Annual Revenue:)</b> |       |                 |                 |                 |            |
| Transmission                             | 1,000 | \$15,161        | \$18,471        | \$3,310         | 22%        |
| Merchant Function                        | 1,000 | \$0             | \$9,209         | \$9,209         |            |
| Other                                    | 1,000 | \$1,570         | \$2,430         | \$860           | 55%        |
| <b>Total Offsetting Annual Revenue</b>   | 1,000 | <b>\$16,731</b> | <b>\$30,110</b> | <b>\$13,379</b> | <b>80%</b> |

# SLCA/IP Rate Comparisons

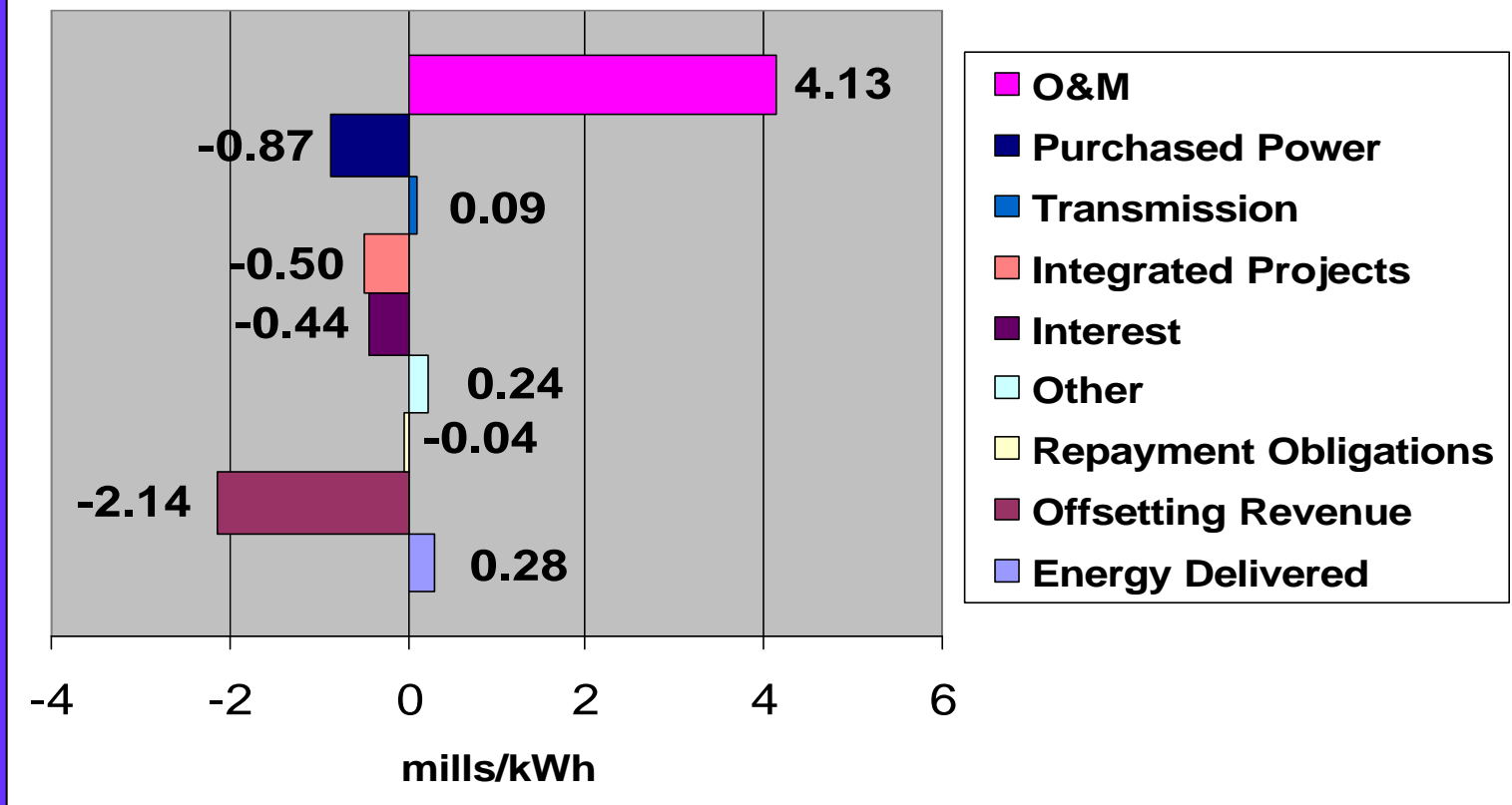
## Power Sales and Rates

### Current Rate PRS v. Proposed Base Rate PRS

|                                 |             | FY 1997 PRS  | FY 2000 PRS    | <i>Change from Current Rate</i> |         |
|---------------------------------|-------------|--------------|----------------|---------------------------------|---------|
|                                 |             | Current Rate | Proposed Base  |                                 |         |
| Item                            | Unit        | 1998 CB      | 2003 Work Plan | Amount                          | Percent |
| Net Annual Revenue Requirements | 1,000       | \$111,591    | \$114,488      | \$2,897                         | 3%      |
| Energy Sales                    | MWH         | 6,352,718    | 6,250,518      | -102,200                        | -2%     |
| Composite Rate                  | mills/kWh   | 17.57        | 18.32          | 0.75                            | 4%      |
| Energy Rate                     | mills/kWh   | 8.1          | 8.4            | 0.30                            | 4%      |
| Capacity Rate (per month)       | \$/kW-month | 3.44         | 3.57           | 0.13                            | 4%      |

# SLCA/IP Rate Comparisons

Summary of Rate Impacts (0.75 mill Increase)



# SLCA/IP PAR

## Reasons

- Volatility of recent purchase power prices.
- Hydrological cycles.
- PAR concept more closely follows these contingencies.



# SLCA/IP PAR

## Formula

- $PAR = \text{purchase power costs} / \text{customer commitment}$
- $\text{Purchase power costs} = \text{purchase estimate} \times \text{price}$
- $\text{Customer commitment} = 6,007 \text{ GWh}$

# SLCA/IP PAR

## Formula Elements

- Purchase requirements
  - First FY of Reclamation's 24-month study.
  - Compare to customer (SHP) commitments of 6,007 GWh.
- Purchase price
  - Based on current Palo Verde futures.

# SLCA/IP PAR Recalculation

- First calculation included with Rate Order.
- First recalculation will be Oct 2004.
- Will include estimate to actual adjustment.
- Applied to each customer bill.

# SLCA/IP PAR

## Example

| Item                                    | Unit      | Amount |
|---|-----------|--------|
| <b><u>Future 2-year calculation</u></b> |           |        |
| Estimated Energy Needs                  | GWh       | 514    |
| Estimated Energy Price                  | mills/kWh | 30     |
| Cost Estimate per Year                  | \$1,000   | 15,420 |
| <b><u>Past 2-year true-up</u></b>       |           |        |
| Actual Purchase Costs                   | \$1,000   | -      |
| Estimated Purchase Costs                | \$1,000   | -      |
| True-up cost/(credit)                   | \$1,000   | -      |
| Total Adder Requirement                 | \$1,000   | 15,420 |
| Long Term SHP deliveries                | GWh       | 6,007  |
| Purchase Adder Rate                     | mills/kWh | 2.6    |

# SLCA/IP Current and Proposed Rates Comparison

|                                | Current Rate   | Proposed Rate  | Increase    |
|--------------------------------|----------------|----------------|-------------|
| <b>Rate Schedule</b>           | <b>SLIP-F6</b> | <b>SLIP-F7</b> |             |
| <b>Base Rate:</b>              |                |                |             |
| Energy (mills/kWh)             | 8.1            | 8.4            | 0.3         |
| Capacity (\$/kWmonth)          | 3.44           | 3.57           | 0.13        |
| Composite                      | 17.57          | 18.32          | 0.75        |
| <b>PAR Example (mills/kWh)</b> | <b>N/A</b>     | <b>2.60</b>    | <b>N/A</b>  |
| <b>Total Composite</b>         | <b>17.57</b>   | <b>20.92</b>   | <b>3.35</b> |

# Firm Power Issues

- Reconstruction of Investment
- Future Aid to Irrigation Costs
- Glen Canyon Cost Allocations
- Bonneville Unit Power Investigation Costs

Questions ?

SLCA/IP Firm Power

**Valerie Deppe**

CRSP Transmission

*Rates Team*



# Purpose of Revising Methodology

- Current rate expires March 30, 2003.
- Requested in last rate process.
- Consistent with other Western regions, other utilities, and RTOs.
- More accurately assigns costs.

# Revised Methodology Timeline

- September 27, 2000 - Customer Meeting
- August 24, 2001 - Data Update
- October 18, 2001 - Informal Meeting
- October 1, 2002 - Rate Effective

# Current Firm Transmission Rate

- SP-PTP5 effective April 1, 1998.
- Expires March 30, 2003.
- Formula-based rate updated annually.
- Revenue Requirements constant, credits and reservations updated every April 1<sup>st</sup>.

# Current Firm Transmission Rate

- April 1998 rate was \$2.23/kW-month.
- April 2002 revision is \$1.78/kW-month.

# Formula for Current and Revised Methodologies

- Annual Revenue Requirement  
Less Transmission Credits  
Divided by Transmission Reservations

# Comparison Between Methodologies

- Basis for cost projections
  - Current Methodology
    - Average of five-year projections.
  - Annual Fixed Charge Methodology
    - Single test year, plus any known and measurable.

# Comparison Between Methodologies

- Revenue Requirement
  - Current Methodology
    - Sum of transmission share of Western's investment, O&M, and transmission purchases.
  - Annual Fixed Charge Methodology
    - Fixed Charge Rate multiplied by Net Investment.

# Comparison Between Methodologies

- Joint Use Investment Allocation
  - Current Methodology
    - 50/50
  - Annual Fixed Charge Methodology
    - Various methods



# Comparison Between Methodologies

- O&M Allocation
  - Current Methodology
    - Transmission's share of total Western and Reclamation CRSP investment.
  - Annual Fixed Charge Methodology
    - Transmission's share of only Western's CRSP investment.

# Rates

- Based on FY 1999 audited data:
  - Current methodology - \$2.21/kW-month.
  - Annual Fixed Charge methodology - \$2.30/kW-month (revised from \$2.16/kW-month).
- FY 2000 audited data will be test year.
- Updated annually.

# Rate Schedules

- Includes Scheduling, System Control & Dispatch.
- Financial compensation for Losses.
- Pass-through for Industry Restructuring Costs.

Questions ?

CRSP Transmission

**Rodney Bailey**

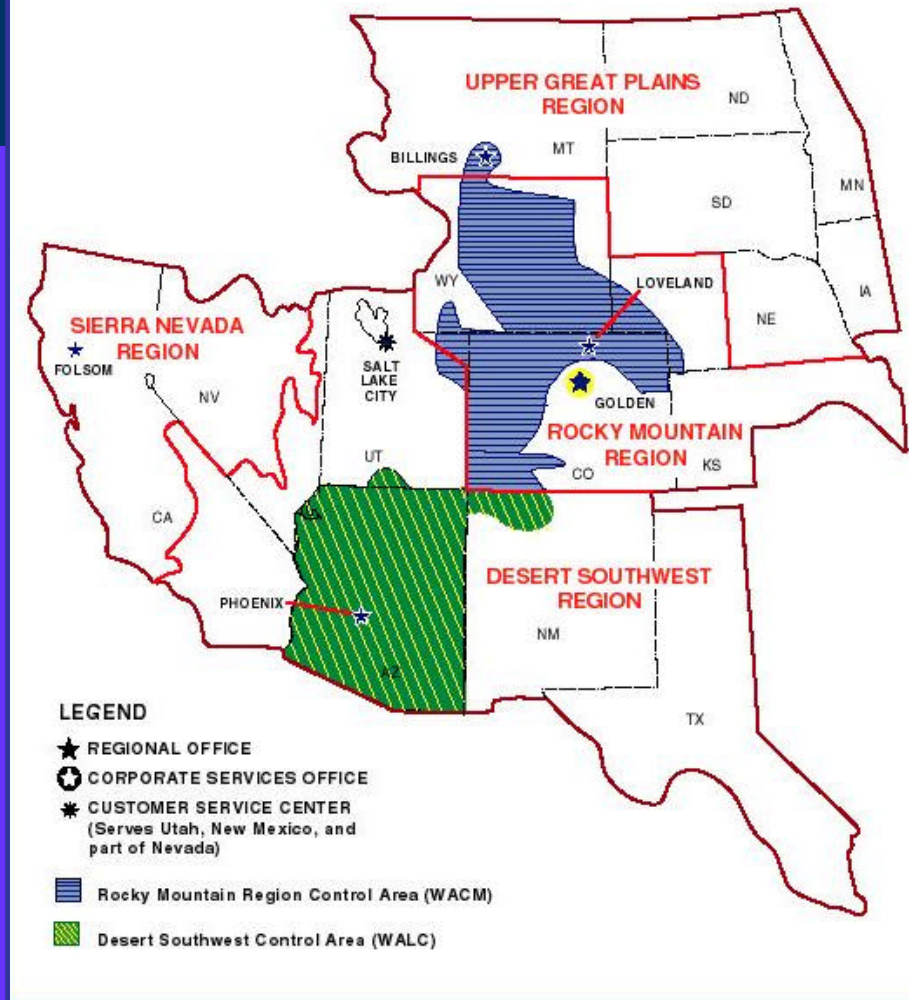
Ancillary Services

*Rates Team*

# Ancillary Services

- Scheduling, System Control & Dispatch  
(Only service included in CRSP Transmission Rate)
- Reactive Supply and Voltage Control
- Regulation and Frequency Control
- Energy Imbalance
- Spinning Reserves
- Supplemental Reserves

# Control Area Consolidation Post-April 1, 1998 Control Areas



# Scheduling, System Control & Dispatch

- Defined under Schedule 1 of Western's Tariff.
- No change from current rate methodology.



# Reactive Supply & Voltage Control

- Defined under Schedule 2 of Western's Tariff.
- WACM & WALC rate schedules apply, which include CRSP revenue requirement.
- Current Rates
  - WACM - \$0.10/kW-month.
  - WALC - \$0.05/kW-month.
- No change from current rate methodology.

# Regulation & Frequency Control

- Defined under Schedule 3 of Western's Tariff.
- If available from SLCA/IP resources, will be charged the SLCA/IP firm capacity rate.
- If unavailable from SLCA/IP resources
  - WACM - \$0.16/kW-month.
  - WALC - Generator Capacity Charge.
- No change from current rate methodology.

# Energy Imbalance

- Defined under Schedule 4 of Western's Tariff.
- Provided through Control Area.
- No change from current rate methodology.

# Spinning & Supplemental Reserves

- Defined under Schedules 5 & 6 of Western's Tariff.
- Obtain from open market and pass-through costs, based on WSPP contract.
- Minor change from current rate methodology.

**Questions ?**

Ancillary Services

# Schedule for Rate Adjustment Process

- March 6, 2002
  - Publish FRN for proposed rates. Brochures mailed out to customers and interested parties.
- March 19, 2002
  - Public Information Forum.
- April 23, 2002
  - Second Public Information Forum.
  - Public Comment Forum.

# Schedule for Rate Adjustment Process

- June 4, 2002
  - End of Comment Period.
- September 1, 2002
  - Rate Order published.
- October 1, 2002
  - SLCA/IP Firm power, CRSP transmission, and ancillary services rates become effective.

# Contacts

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**Questions ?**

**Public Information Forum**

**March 19, 2002**