

**Arizona Independent Scheduling  
Administrator Association  
(Az ISA)**

**Proposed**  
**Implementation Plan**  
**Revision 1**  
**August 21, 2000**

**PROPOSED Az ISA IMPLEMENTATION PLAN**  
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# SECTION 1

## EXECUTIVE SUMMARY

### Background

The Retail Competition Rules adopted by the Arizona Corporation Commission (Commission or ACC) directed that the Affected Utilities that own or operate transmission facilities form an Arizona Independent Scheduling Administrator (Az ISA). The Rules (R14-2-1609.D) describe five characteristics that the Az ISA would be required to possess. These characteristics or responsibilities are:

- Calculation of Available Transmission Capacity (ATC) for the Arizona transmission utilities of Affected utilities and other Az ISA participants and develop and operate a statewide OASIS
- Implement and oversee nondiscriminatory application of operating protocols to ensure transmission access
- Provide dispute resolution processes to resolve claims of discriminatory treatment in the reservation, scheduling, use and curtailment of transmission services
- Utilize a single standardized procedure for all requests (wholesale, Standard Offer retail, and competitive retail) for reservation and scheduling the use of the Arizona transmission facilities belong to the Affected Utilities and other Az ISA participants
- Implement a transmission planning process to assure that future load requirements will be met.

The Rules (R14-2-1609E) also require that the Affected Utilities file an Az ISA implementation plan that addresses:

- Az ISA governance, incorporation, financing, and staffing
- Acquisition of physical facilities and staff
- Schedule for the phased development of the Az ISA functionality and proposed transition to a regional Independent System Operator (ISO) or Regional Transmission Organization (RTO)
- Contingency plans to ensure that critical functionality is in place no later than 3 months following the adoption of the Competition Rules
- Other significant issues related to the timely and successful implementation of the Az ISA.

## Summary of Implementation Plan

Since the ACC adopted the Competition Rules, FERC has issued Order 2000. Under FERC Order 2000, all public utilities that own, operate or control interstate transmission facilities and are not members of an approved ISO must file by October 15, 2000 a plan to participate in an RTO that will be operational by December 15, 2001 or explain why it cannot now join an RTO and its timeline for future efforts. Items that have been identified for implementation by the Az ISA include functionalities that may best be deferred until an RTO is operational. By the latter part of 2000 the Az ISA will be able to review plans filed by the utilities for RTO implementation and make an informed decision on the need for the Az ISA to undertake certain functions prior to an RTO providing the function. The transition from the ISA to an RTO will be dependent on the schedule for completing the development of an RTO such as Desert STAR. RTO formation is currently under development in response to the December 20, 1999, FERC final rule on regional transmission organizations. Docket No. RM99-2-000 (FERC 2000). Currently, Desert STAR anticipates filing its FERC tariff in the third quarter of 2000. The Az ISA Implementation Plan is presented in a staged format to allow for Az ISA functions that could be deferred until an RTO is operational.

The following summarizes each of the required aspects of the Az ISA Implementation Plan (Plan) in accordance with R14-2-1609. Each element is discussed in detail in Sections 2 and 3 of the Plan.

### Az ISA governance, incorporation, financing, and staffing

The Az ISA was incorporated in September 1998 as a non-profit Arizona corporation. Governance of the Az ISA was established in its by-laws dated October 29, 1998. The by-laws established the duties and responsibilities of the Az ISA and also defined membership classes and participation eligibility.

The initial financing of the Az ISA has been primarily from loans from transmission owners and certain Affected Utilities including Arizona Public Service Company, Tucson Electric Power, Citizens Utilities, Arizona Electric Power Cooperative, and Salt River Project, and to a minor extent from membership dues. The initial capitalization loans, amounting to approximately \$1.2 million, will be repaid with interest over a two-year period after FERC acceptance and implementation of the Az ISA tariff.

The phased development of Az ISA is based on ~~two~~three implementation phases identified in the PM, as follow:

1. Phase I<sup>1</sup> (Initial) - This phase includes Alternative Dispute Resolution (ADR) and Limited Protocol Manual oversight. This oversight function includes OASIS and Allocated Retail Network Transmission (ARNT). The transmission providers (TPs)/Control Area Operators (CAOs) will implement the protocols except where waivers are specifically granted.

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<sup>1</sup> Phase I as defined in PM

2. Phase II<sup>2</sup> (Full Compliance)-Phase - In this phase Az ISA functions will include all responsibilities in Competition Rules. In addition to the Initial Phase I function, Az ISA will: a) be responsible for OASIS/ATC calculations, b) utilize standardize procedure for transmission reservation & scheduling and c) implement a statewide transmission planning process.
3. Phase II (Expanded Features)-Phase - Although not a part of the Competition Rules, there are features which can enhance the Az ISA functionality. The functions are ARNT and Energy Imbalance (EI) trading and ARNT auction settlement.

Only the Initial Phase is currently planned to become operational. The Phase II Full Compliance and Expanded Features Phases will be reviewed after the FERC Order 2000 filings to determine if and when these phases should be implemented.

Staffing requirements and estimated annual cost for the each phase described about are shown in the following table.

<b>Phase</b>	<b>Staffing</b>	<b>Annual Cost (\$000)<sup>1</sup></b>
1. <u>Phase I</u> , Initial	5	757 <sup>2</sup>
2. <u>Phase II</u> , Full Compliance	18	2,258
3. <u>Phase II</u> , Expanded Features	2	2,105
<b>Total</b>	<b>25</b>	<b>5,120</b>

1 Includes 10% Budget Contingency

2 Startup, \$490K; Administer PM, \$267K

In addition, there is a Capitalization repayment-funding requirement of \$693K/year for two years.

#### Acquisition of Physical Facilities and Staff

Currently the Az ISA is housed in the offices of Western Area Power Administration (Western). The Western facilities, located on 43<sup>rd</sup> Avenue in Phoenix, have sufficient space available for the foreseeable future that can be used by the Az ISA. Therefore, it is not anticipated that the Az ISA will need additional space within its anticipated lifespan.

As noted above, the Az ISA will require additional staff to fulfill its functions. It is anticipated that staffing will be acquired through advertisements in trade journals and utilizing staffing specialists as required. One of the major difficulties that the Az ISA will face is the ability to attract qualified staff. The utility business, as a whole, is facing difficulty attracting and retaining qualified staff. The Az ISA's ability to attract staff will be exacerbated because of the fact that, by design, the entity will cease to exist in a relatively short timeframe.

#### Schedule for Phased Development

The following table lists the key elements in the Az ISA development:

#### **Proposed Az ISA Implementation Plan Timeline**

<sup>2</sup> Phase II as defined in PM

- |   |  |
|---|--|
| 1. Affected Utilities submit Protocols Manual to ACC                                  | June 15, 2000                                  |
| 2. Affected Utilities submit Implementation Plan to ACC for review                    | June 15, 2000                                  |
| 3. Az ISA draft FERC filing completed and distributed to Az ISA membership for review | June 30, 2000                                  |
| 4. Az ISA Board considers approval of FERC Filing                                     | <del>August 21</del> <del>July 17</del> , 2000 |
| 5. Az ISA provides ACC with copy of draft FERC Filing                                 | August 28, 2000                                |
| 6. <del>ACC Open Meeting</del>  | <del>August 22-23, 2000</del>                  |
| 7. Az ISA files tariff with FERC  | By September 23, 2000                          |
| 8. Az ISA implements FERC approved tariff   | By November 23, 2000                           |

### Other Significant Issues

The Az ISA passed a significant milestone with the conditional ~~acceptance~~~~approval~~ of the Protocol Manual by the Board of Directors on April 7, 2000. Other significant milestones still must be met including the preparation and filing of a FERC tariff. The membership of the Az ISA consists of organizations with a broad spectrum of interests and structures, which makes for significant debate before consensus can be reached. This has resulted in the inability to meet the initial schedules identified by the Commission in the Retail Electric Competition Rules.

Among the issues that the Az ISA must address before it can successfully move forward with implementation are:

- Funding - R14-2-1609G states “It is the intent of the Commission that prudently-incurred costs incurred by Affected Utilities in the establishment of the Arizona Independent Scheduling Administrator and subsequently the Independent System Operator, should be recovered from customers using the transmission system, including the Affected Utilities’ wholesale customers, Standard Offer retail customers, and competitive retail customers on a non-discriminatory basis through Federal Energy Regulatory Commission-regulated rates.” The rules also indicate that the Commission may authorize Affected Utilities to recover the Az ISA costs through a distribution surcharge should the FERC not permit recovery of such costs. The Az ISA board of directors is currently addressing the cost recovery issues and has not reached consensus. It should be noted that many of the Az ISA participants are neither Commission nor FERC regulated. Further, some Affected Utilities purchase their power requirements at wholesale from out-of-state suppliers. Although the Commission’s Rules indicate that it expects transmission owners to recover costs associated with the Az ISA through regulated rates or distribution surcharges, locally-controlled utilities such as SRP are not rate-regulated by the Commission or FERC. Cost recovery is a significant issue for Az ISA.
- Staffing – As previously noted, the Az ISA may have difficulty attracting qualified staff members. It may become necessary to staff the Az ISA through contract employees or by utilizing consultants. This will add to the costs of the Az ISA operations.

## **SECTION 2**

### **IMPLEMENTATION PLAN OVERVIEW**

#### **Background**

The Az ISA was formed in September 1998 as a non-profit Arizona corporation to support the provision of comparable, non-discriminatory retail access to the Arizona transmission system to facilitate a robust and efficient competitive electric market in Arizona. The Az ISA is intended to serve as an interim electric transmission scheduling administrator to facilitate the operation of Arizona's competitive electric retail market until the implementation of an RTO that supercedes the Az ISA. As of April 25, 2000, the Az ISA had 62 members. A membership list is included in the Plan Appendix.

#### **Governance**

The Az ISA is governed by a Board of Directors chosen from Az ISA member representatives. The current Board of Directors roster is included in the Plan Appendix. There are five member classes: transmission facilities providers; local load servicing entities; aggregators; independent generators and wholesale power marketers; and end-users. The Az ISA Board consists of eleven voting members, including two representatives from each member class, plus the Az ISA Acting Director. All votes of the Board require a two-thirds majority, and no business shall be conducted without two-thirds of the Board present.

#### **Alternate Dispute Resolution**

The Az ISA By-laws also provide for three alternative dispute resolution forums, including a fast-track arbitration that provides a decision within 24 hours, an expedited arbitration that is completed within two weeks, and, by mutual agreement of the disputing parties, mediation. For complicated disputes, the By-laws provide that parties to the dispute may initiate peer review or a mediation process in accordance with the By-laws or the Director of the Az ISA shall cause an arbitration procedure to be initiated unless the parties to the dispute choose to take the dispute directly to FERC or the courts, whichever is appropriate.

#### **Funding**

The Az ISA issued promissory notes to each utility contributing to the Az ISA start-up costs. Total amount for start-up loans is \$1,200,000. Repayment of these start-up loans will begin 60 days after the FERC tariff is approved. Repayment period is 24 months.

Still to be determined is the tariff structure the Az ISA will use to fund repayment of start-up loans as well as annual operation and maintenance costs. The type(s) and amounts will be included in the draft tariff document scheduled for distribution to the Az ISA membership for review June 30, 2000.

#### **Operating Protocols**

During the development of the plan for the Az ISA, the stakeholders determined the need for a set of operational and administrative protocols to govern operations of the Az ISA. The protocols have been developed through a participatory process open to all stakeholders. The protocols define the duties to be performed and the procedures to be followed by the Az ISA, control area operators (CAO), and transmission providers (TP) that become members of the Az ISA, and scheduling coordinators (SC). It is intended that the protocols will result in the CAOs and TPs employment of uniform and non-discriminatory standards and procedures for the use of the interconnected transmission system in Arizona for retail electric service.

The protocols address the following subjects as they affect transmission for retail electric competition: total transmission capability determination; retail transmission allocation; retail transmission reservations and OASIS; congestion management; emergency operations; must-run generation; ancillary services; energy imbalance for retail transmission; scheduling; and after-the-fact checkout/settlement for retail transmission.

On April 7, 2000, the Az ISA Board of Directors ~~conditionally accepted~~approved the operational and administrative protocols that will be used by most entities serving retail load in Arizona. The Az ISA is now preparing the FERC and ACC filings requesting authority to implement the Protocols. A copy of the resolution of the Board of Directors that approved the Protocols Manual is included in the Appendix.

## Next Steps

The Plan accounts for Az ISA functions that may be deferred until an RTO is operational. RTO formation is currently under development in response to the December 20, 1999, FERC final rule on regional transmission organizations. Docket No. RM99-2-000.

Under this Order, all public utilities that own, operate or control interstate transmission facilities and are not members of an approved ISO must file by October 15, 2000 a plan to participate in an RTO that will be operational by December 15, 2001, or explain why it cannot now join an RTO and its timeline for future efforts. Items that have been identified for implementation by the Az ISA include functionalities that may best be deferred until an RTO is operational. By the latter part of 2000 the Az ISA will be able to review plans filed by the utilities for RTO implementation and make an informed decision on the need for the AISA to undertake certain functions prior to an RTO providing the function.

The following table “Az ISA Action or Document and Equivalent ACC Rule R14-2-1609 Requirement” presents the association between ACC Rule 1609 and the Az ISA documentation that meets the ACC requirements. Note that implementation of many functions (items 1,2,5,6 and 8) will be considered by the Board after the public utilities that own, operate or control interstate transmission facilities and are not members of an approved ISO file with the FERC a plan to participate in an RTO that will be operational by December 15, 2001. Other future implementation dates will require Az ISA Board approval of the FERC tariff filing and a Monitoring Plan that is included in the April 7, 2000 Board resolution.



**Az ISA Action or Document  
and Equivalent ACC Rule R14-2-1609 Requirement**

Item	R14-2 1609	Requirement	Az ISA Document or Action	Imple Phase
1	D.1	The Az ISA shall calculate Available Transmission Capacity (ATC) for Arizona transmission facilities that belong to the Affected Utilities or other Arizona Independent Scheduling Administrator participants.	<u>Operating Protocols Section IV</u> Transmission Reservation and OASIS Management Principles	<u>Phase II</u>
2	D.1	Az ISA shall develop and operate an overarching statewide OASIS	<u>Operating Protocols Section IV</u> Transmission Reservation and OASIS Management Principles	<u>Phase II</u>
3	D.2	The Az ISA shall implement and oversee the nondiscriminatory application of operating protocols to ensure statewide consistency for transmission access.	<ul style="list-style-type: none"> <li>Az ISA Approval of Operating Protocols</li> <li>FERC Approval of Az ISA Tariff</li> </ul>	<u>2-Phase</u>
4	D.3	The Az ISA shall provide dispute resolution processes that enable market participants to expeditiously resolve claims of discriminatory treatment in the reservation, scheduling, use, and curtailment of transmission services.	Az ISA Bylaws	<u>Phase I</u>
5	D.4	All requests (wholesale, Standard Offer retail and competitive retail) for reservation and scheduling of the use of Arizona transmission facilities that belong to the Affected Utilities or other Az ISA participants shall be made to, or through, Az ISA using a single, standardized procedure.	<u>Operating Protocols</u> Oversight only	<u>Phase II</u>
6	D.5	The Az ISA shall implement a transmission planning process.	<u>Operating Protocols Section III</u> Total Transmission Capability Determination Principles	<u>Phase II</u>
7	E	Implementation Plan	<ol style="list-style-type: none"> <li>Articles of Incorporation</li> <li>By-laws</li> <li>Governance</li> <li>Protocols</li> <li>Tariff</li> <li>File Tariff</li> <li>Implement Tariff</li> </ol>	<u>1-Phase</u>
8	I	Under auspices of the Az ISA, the Affected Utilities and other stakeholders shall develop statewide protocols for pricing and availability of services from Must-Run Generating Units.	<u>Operating Protocols Section VIII</u> Must-Run Generation Protocol	<u>Phase I</u>

Item	R14-2 1609	Requirement	Az ISA Document or Action	<u>Imple Phase</u>
9	J	The Affected Utilities and other stakeholders, under the auspices of the Az ISA, shall identify statewide services to be settled on and developed fair and reasonable pricing mechanisms to assure a consistent and fair settlement process.	<ul style="list-style-type: none"> <li>Az ISA Approval of Operating Protocols</li> </ul>	<u>2-Phase</u>

### Assumptions:

1. Tariff filing approved by the Board prior to August 2, 2000
2. FERC filing by September 23, 2000

The Plan is intended to provide the Az ISA Board of Directors, the Arizona Corporation Commission (Commission), and other interested parties with information on Az ISA organizational structures, costs, and implementation timelines that would be required to meet the intended purpose of the organization.

An Az ISA work group was formed to develop an Implementation Plan that would meet the requirements of the Az ISA Board of Directors and the ACC. The work group developed a plan that included several stages in the development of Az ISA functions. The benefits of this approach are separation of information on costing and implementation considerations associated with each function. The information can be used to evaluate the current and future needs of the Az ISA. The implementation stages are:

1. Phase I<sup>3</sup> (Initial) Phase - This phase includes Alternative Dispute Resolution (ADR) and Limited Protocol Manual oversight. This oversight function includes OASIS and Allocated Retail Network Transmission (ARNT). All TPs/CAOs will implement the Az ISA's protocols, except those specifically granted waivers.
2. Phase II<sup>4</sup> (Full Compliance) Phase - In this phase, Az ISA functions will include all responsibilities in Competition Rules. In addition to the Initial Phase I function, Az ISA will: a) be responsible for OASIS/ATC calculations, b) utilizing standardized procedures for transmission reservation & scheduling and c) implementing a statewide transmission planning process.
3. Phase II (Expanded Features) Phase - Although not a part of the Competition Rules, there are features which can enhance the Az ISA functionality. Namely ARNT and Energy Imbalance (EI) trading and ARNT auction settlement.

Each phase of implementation is covered individually in Section 3. Section 3 includes references to the part of By-laws, Protocols or ACC rule that require the function, and the plan for implementing the function.

The format for the detailed plan is the following:

<sup>3</sup> Phase I PM implementation

<sup>4</sup> Phase II PM implementation

- Identification of the phase and task
- Identification of the activities to be undertaken
- Identification of the controlling rule or requirement for the activity (i.e. the Protocol Manual, the By-Laws of the Az ISA, and/or Arizona Corporation Commission Rule applicable to Affected Utilities)
- Activities included in the phase
- Activities not included in the phase
- Implementation Requirements ( Equipment and Resources, Staffing , Capital, Operations and Maintenance Expenses, Timeframe for Completion, Timeframe for Implementation, Contingency Plan
- Plan Detail and Costs

### **Proposed Az ISA Implementation Plan Timeline**

- |   |  |
|---|--|
| 1. Utilities submit Protocols Manual to ACC   | June 15, 2000                              |
| 2. Utilities submit Implementation Plan to ACC for review                             | June 15, 2000                              |
| 3. Az ISA draft FERC filing completed and distributed to Az ISA membership for review | June 30, 2000                              |
| 4. Az ISA Board considers approval of FERC Filing                                     | <del>August 21</del> <u>July 17</u> , 2000 |
| 5. Az ISA provides ACC with copy of FERC Filing                                       | August 28, 2000                            |
| 6. <del>ACC Open Meeting</del>  | <del>August 22-23, 2000</del>              |
| 7. Az ISA files tariff with FERC  | By September 23, 2000                      |
| 8. Az ISA implements FERC approved tariff   | By November 23, 2000                       |

## SECTION 3

### IMPLEMENTATION PLAN PHASES

#### Phase ~~I1~~ (Initial), ~~Task-1~~ ADR Process

##### Implementation Directives

###### Protocols Manual

Protocols Manual Section I “Introduction”, Paragraph 6.”Disputes”: “ Disputes arising from the application or implementation of these Protocols shall be resolved pursuant to the dispute resolution procedures contained in Section 6 of the Az ISA By-Laws.”

###### Az ISA By-laws

“5.3.9. Implement the dispute resolution procedures provided in Section 6 as appropriate;”

“5.3.10. Provide oversight and take action, as required, to ensure compliance with the Protocols Manual and FERC-recognized Standards of Conduct related to transmission access and operation of the Interconnected Transmission System; investigate and take action on complaints related to the application of the Protocols Manual and such Standards of Conduct and to resolve other issues related to discriminatory treatment in the provision of transmission service;”

“5.3.11. Make immediate decisions, based on the Protocols Manual, with respect to irregularities discovered during the performance of his/her duties described in Section 5.3.10 and with respect to disputes between transmission providers and transmission users”

“6. Az ISA Dispute Resolution Process that includes: Section 6.1, “Fast-Track ADR”, Section 6.2., “Alternative Dispute Resolution Procedures”, and Section 6.3. “Disputes Involving Government Agencies”.”

###### ACC Rule R14-2-1609

R14-2-1609D-3. “The Arizona Independent Scheduling Administrator shall provide dispute resolution processes that enable market participants to expeditiously resolve claims of discriminatory treatment in the reservation, scheduling, use, and curtailment of transmission services.”

#### Activities included in Phase ~~I1~~ (Initial), ADR Process ~~Task-1~~

Executive Director to provide ADR  
Limited Protocol Manual oversight

#### Activities not included in Phase ~~I1~~ (Initial), ADR Process ~~Task-1~~

Protocol Manual Oversight  
Data collection from Transmission Providers

Phase ~~I1~~ (Initial), ~~ADR Process Task1~~ Implementation Plan

**ADR and Limited PM Oversight**

I.	Equipment and Resources	Executive Director to provide ADR
II.	Staffing	1. Executive Director 2. Full time administrative support
III.	Capital	None
IV.	O and M Expenses	Staffing and Other Expenses \$490K
V.	Timeframe	By November 23,2000
VI.	Implementation	N/A – Staff available
VII.	Contingency Plan	None

Phase ~~I1~~ (Initial), ~~ADR Process Task1~~ Detail and Costs

ADR and Limited PM Oversight				
Item	Function	Capital \$1000	O and M \$1000/yr	Staffing Requirements
1	ADR		100	1
2	PM Oversight		100	1
3	Administrative and Infrastructure		218	
4	Legal		72	
	<b>Total</b>	-	\$490	2

Az ISA Costs		
Item	Cost Item	\$/yr
1	O and M	\$490,000
2	Capital for 2yr	-
	<b>Total</b>	\$490,000

## **Interim Protocols Manual.**

The Interim Protocols Manual (PM) is the set of Protocols as amended and conditionally accepted by the Az ISA board on April 7, 2000. The Az ISA Board approved implementation of the Protocols on an interim basis until a FERC approved Regional Transmission Organization is established. The Board further approved implementation of the Protocols on an interim basis subject to certain conditions being met. Furthermore, implementation of many of the Az ISA organizational responsibilities specified in the PM would be contingent on meeting defined retail transaction levels.

## **Implementation Directives**

### **Protocols Manual**

Protocols Manual Section I “Introduction”, Paragraph 3 – “During the development of the plan for the Az ISA, the stakeholders determined the need for a set of operational and administrative protocols -- the "Protocols Manual" -- to govern operations of the Az ISA.”

Protocols Manual Section I “Introduction”, Paragraph 3 – “The Protocols Manual, as set forth herein, defines the duties to be performed and the procedures to be followed by the Az ISA, CAOs and TPs that become members of the Az ISA, and SCs.”

### **Az ISA By-laws**

“5.3.3 Develop with interested representatives of the Member Classes the Protocols Manual for the approval of the Board”

“5.3.10. Provide oversight and take action, as required, to ensure compliance with the Protocols Manual and FERC-recognized Standards of Conduct related to transmission access and operation of the Interconnected Transmission System; investigate and take action on complaints related to the application of the Protocols Manual and such Standards of Conduct and to resolve other issues related to discriminatory treatment in the provision of transmission service;”

### **ACC Rule R14-2-1609**

R14-2-1609D-2. “The Arizona Independent Scheduling Administrator shall implement and oversee the nondiscriminatory application of operating protocols to ensure statewide consistency for transmission access. These operating protocols shall include, but are not limited to, protocols for determining transmission system transfer capabilities, committed uses of the transmission system, available transfer capabilities, Must-Run Generating Units, energy scheduling, and energy imbalances.”

**Activities included in Phase ~~I1~~ (Initial), Administer Interim Protocols Manual ~~Task 2~~:**

ADR

Administer Protocols Manual

Limited monitoring of TPs OASIS and ARNT scheduling functions

**Activities not included in Phase ~~I1~~ (Initial), ~~Task 2~~ Administer PM**

State wide OASIS

State wide scheduling

State wide planning

ARNT auction and trading

Energy Imbalance trading and settlement

**Phase ~~-I1~~ (Initial), ~~Task 2~~ Administer PM - Implementation Requirements**

I.	Equipment and Resources	Personal computers, and office supplies
II.	Staffing	1. 2 Data technicians 2. Engineer
III.	Capital	1. 3 PC workstations 2. Office furniture Total \$15K
IV.	O and M Expenses	1. Staffing 2. Other Expenses Total \$259
V.	Timeframe	By November 23,2000
VI.	Implementation	Staff in place by October 23, 2000
VII.	Contingency Plan	No staff in place by October 23, 2000 1. TPs to provide data to Az ISA as needed for ADR and oversight 2. Director available to perform ADR and limited oversight 3. Continue to recruit: (i) engineer, (ii) analysis (part time office manager onboard)

April 7 PM w/o Planning/Scheduling or ARNT/EI Additions				
Item	Function	Capital \$1000	O and M \$1000/yr	Staffing Requirements
1	ATC/OASIS		56	1
2	Administer PM	15	112	2
3	Administrative and Infrastructure		19	
4	Legal		72	
	<b>Total Task 2</b>	15	\$259	3.0

Az ISA Costs	
Cost Item	\$/yr
O and M	259,000
Capital for 2yr	8,223
<b>Total</b>	<b>\$267,223</b>



## Phase II2 (Full Compliance), ~~Task 1~~- OASIS and ATC Calculation

### Implementation Directives

#### Protocols Manual

Protocols Manual Section 4 “Transmission Reservations and OASIS Management Principles” addresses the approach the Az ISA will utilize to implement a statewide OASIS. Prior to the Az ISA’s implementation of a statewide OASIS, OASIS management for RNITS will continue to be performed by the TPs, with Az ISA oversight. After the Az ISA has implemented the statewide OASIS, the Az ISA will administer this single statewide OASIS for reservations for both RNITS and wholesale transmission service provided pursuant to the TP’s OATT until such time as a RTO takes over such function.

Protocols Manual Section 4 “Transmission Reservations and OASIS Management Principles” addresses the process the Az ISA will utilize to monitor and calculate ATC.

Paragraph 4.3: Az ISA will monitor release of ATC on each TP’s OASIS.

Paragraph 4.4: Az ISA will begin to develop systems to allow it to calculate and update ATC.

#### Az ISA By-laws

“5.3.4 Calculate ATC.

5.3.5 Monitor the OASIS with the ultimate objective of developing and operating one state-wide OASIS on which (i) all ATC is posted, (ii) all transmission reservation requests are received, and (iii) ancillary services and secondary transmission are posted.

5.3.7. Update ATC after receipt of accepted transmission reservations and confirmed energy schedules.

5.3.8 Monitor releases of ATC to ensure compliance with the Protocols Manual.”

#### ACC Rule R14-2-1609

R14-2-1609D-1: “The Arizona Independent Scheduling Administrator shall calculate Available Transmission Capacity (ATC) for Arizona transmission facilities that belong to the Affected Utilities or other Arizona Independent Scheduling Administrator participants and shall develop and operate an overarching statewide OASIS.”

## Activities included in Phase II2 (Full Compliance), ~~Task 1~~ OASIS and ATC Calculation

Az ISA developed OASIS and Website  
Staff to operate and maintain OASIS  
Staff to monitor ATC

## Activities not included in Phase II2 (Full Compliance), ~~Task 1~~ OASIS and ATC Calculation

N/A

**Phase II2 (Full Compliance), ~~Task 1~~ - OASIS and ATC Calculation Implementation Requirements** |

I. Equipment and Resources	<ol style="list-style-type: none"> <li>1. 2 PC workstations</li> <li>2. Office furniture</li> <li>3. High speed data communication link</li> <li>4. Adapt existing OASIS site</li> </ol>
II. Staffing	2 engineers
III. Capital	<ol style="list-style-type: none"> <li>1. 2 PC workstations</li> <li>2. Office furniture</li> </ol> Total \$15K
IV. O and M Expenses	<ol style="list-style-type: none"> <li>1 Staffing \$200K</li> <li>2. OASIS site \$10K</li> </ol> Total \$210
V. Timeframe	Post October 15, 2000
VI. Implementation	<ol style="list-style-type: none"> <li>1. Az ISA Technical workgroup will determine technical requirements of Az ISA OASIS site</li> <li>2. Az ISA Technical workgroup to determine data, software and hardware needed for Az ISA to compute ATC, CU and TTC</li> <li>3. Post October 15, 2000 specifics will determine timetable for staffing, equipment and facilities requirements.</li> <li>4. Recruit staff</li> </ol>
VII. Contingency Plan	TPs to provide data to Az ISA as needed

OASIS and ATC Calculation				
Item	Function	Capital \$1000	O and M \$1000/yr	Staffing Requirements
1	ATC/OASIS	15	210	2
2	Administer PM			
	<b>Total</b>	15	210	2

Az ISA Costs	
Cost Item	\$/yr
O and M	210,000
Capital for 2yr	8,223
<b>Total</b>	<b>\$218,223</b>

**Phase II2 (Full Compliance), ~~Task 2~~ - State Wide Standardized Scheduling Procedure (including Wholesale)**

**Implementation Directives**

**Protocols Manual**

Protocols Manual Section VI “Scheduling Protocol” defines the processes and requirements for scheduling energy over specific transmission path(s) for Retail Network Load.

**Az ISA By-laws**

“5.3.6. Receive transmission reservation requests and energy schedules concurrently with receipt by Member control area operators and transmission owners”

**ACC Rule R14-2-1609**

R14-2-1606D-4. “All requests (wholesale, Standard Offer retail, and competitive retail) for reservation and scheduling of the use of Arizona transmission facilities that belong to the Affected Utilities or other Arizona Independent Scheduling Administrator participants shall be made to, or through, the Arizona Independent Scheduling Administrator using a single, standardized procedure.”

**Phase II2 (Full Compliance), ~~Task 2~~ - State Wide Standardized Scheduling Procedure (including Wholesale) Implementation Plan**

I.	Equipment and Resources	1. 2 Scheduling consoles 2. 4 PC workstations
II.	Staffing	1. 2 – 7x24 Scheduling Desks 10 – Schedulers 2. 3 Preschedulers 3. Supervisor
III.	Capital	1. Scheduling Software \$500k 2. Network Software, Interface to TPs, Voice recorder, Computer hardware and PCs -- \$200k
IV.	O and M Expenses	1. Payroll \$1,400k 2. Technical support services \$45k
V.	Timeframe	Post October 15, 2000
VI.	Implementation	Hire personnel, procure hardware and software by September 1, 2000
VII.	Contingency Plan	Using staff identified under “Monitoring PM”: TPs to copy schedules to Az ISA as requested

<u>State Wide Standardized Scheduling Procedure (including Wholesale)</u> <del>State-wide Scheduling</del>				
Item	Function	Capital \$1000	O and M \$1000/yr	Staffing Requirements
1	State wide scheduling	700	1,445	14
	<b>Total</b>	700	1,445	14

<b>Az ISA Costs</b>	
Cost Item	\$/yr
O and M	1,445,000
Capital for 2yr	383,752
<b>Total</b>	<b>\$1,828,752</b>

## Implementation Directives

### Protocols Manual

Protocols Manual Section III “Total Transmission Capability (TTC) Determination Principles” identifies transmission planning/operations areas that the Az ISA will participate subject to the Az ISA Board’s direction.

- “2. Subject to the Board’s Direction, the Az ISA Executive Director shall:
- 2.1 Participate in the determination of TTC and Committed uses within the Interconnected Transmission System and revisions thereto.
  - 2.2 Cause the Az ISA to become an affiliate member of the WSCC.
  - 2.3 Participate in SWRTA-sponsored regional coordinated transmission planning efforts.
  - 2.4 Attend, as needed, WSCC Operational Transfer Capability Study Group (OTCSG) meetings for discussion of seasonal ratings on qualified paths within the AZ-NM sub-region of the WSCC.
  - 2.5 As Operating Committee chair, preside over efforts to achieve consistent application of Committed Use determinations within the Interconnected Transmission System.
  - 2.6 Participate in Arizona joint-utility operating and planning study efforts for TTC.
  - 2.7 Participate in the coordination of transmission maintenance schedules among TPs.”

### Az ISA By-laws

“5.3.2 Participate in (i) operating studies used to determine TTC, (ii) coordination of transmission maintenance schedules, (iii) Member control area operators’ and transmission owners’ determination of TTC, and (iv) determination of committed uses on the Interconnected Transmission System”

### ACC Rule R14-2-1609

R14-2-1609D-5 “The Arizona Independent Scheduling Administrator shall implement a transmission planning process that includes all Arizona Independent Scheduling Administrator participants and aids in identifying the timing and key characteristics of required reinforcements to Arizona transmission facilities to assure that the future load requirements of all participants will be met”

**Phase II2 (Full Compliance), ~~Task 3~~ - State Wide Transmission Planning Implementation Plan**

I.	Equipment and Resources	2 High-end PC workstations
II.	Staffing	2 – Planning engineers
3.	Capital	Workstations and office equipment Total 20K
4.	O and M Expenses	Payroll \$200K
5.	Timeframe	Post October 15, 2000
6.	Implementation Plan	Hire experienced personnel, procure hardware and software.
7.	Contingency Plan	Participate in SWRTA, WSCC and Arizona operating and planning studies. Continue to recruit for planning engineers.

State Wide Transmission Planning				
Item	Function	Capital \$1000	O and M \$1000/yr	Staffing Requirements
1	State wide planning	20	200	
	<b>Total</b>	20	200	2

Az ISA Costs	
Cost Item	\$/yr
O and M	200,000
Capital for 2yr	10,964
<b>Total</b>	\$210,964



**Phase II3 (Expanded Features), ~~Task 1~~ - Additional PM Requirements -- Allocated Retail Network Transmission Protocol (ARNT) and Energy Imbalance (EI) Trading, Auction and Settlements**

**Implementation Directives**

**Protocols Manual**

Protocols Manual Section V “Allocated Retail Network Transmission Protocol” identifies ARNT auction and trading mechanisms.

Protocols Manual Section IX “Energy Imbalance Protocol” identifies EI trading and settlement mechanisms

**Phase II3 (Expanded Features), ~~Task 1~~ --Implementation Plan**  
Allocated Retail Network Transmission Protocol (ARNT) and Energy Imbalance (EI) Trading, Auction and Settlements

I.	Equipment and Resources	2 PC workstations
II.	Staffing	2 – Accounting Technicians
III.	Capital	Workstations and office equipment Trading and settlement software Total 1,020K
IV.	O and M Expenses	Payroll 100K
V.	Timeframe	Board approval of business plan prior to June 30,2001 and competitive retail load levels reach 500 MW
VI.	Implementation Plan	Hire experienced personnel, procure hardware and software.
VII.	Contingency Plan	None

**Phase II3 (Expanded Features), ~~Task 1~~ - Plan Details and Costs**

Allocated Retail Network Transmission Protocol (ARNT) and Energy Imbalance (EI) Trading, Auction and Settlements

<u>Allocated Retail Network Transmission Protocol (ARNT) and Energy Imbalance (EI) Trading, Auction and Settlements <del>Additional Requirements -- ARNT and EI</del></u>				
Item	Function	Capital \$1000	O and M \$1000/yr	Staffing Requirements
1	ARNT and EI	10	2,100	2
	<b>Total</b>	10	2,100	2

<b>Az ISA Costs</b>	
Cost Item	\$/yr
O and M	2,100,000
Capital for 2yr	5,482
<b>Total</b>	<b>\$2,105,482</b>

## **SUMMARY of REVISIONS**

### **Revision 1 8/21/00**

- 1 Updated Phase I (Initial) ADR Process and Administer PM cost tables to track 2001 budget estimates in Detailed Implementation Plan:
  - a. Full time Office Manager
  - b. Legal Costs
  - c. Add 10% for budget contingencies
- 2 Revised summary costs in Executive Summary to reflect #1
- 3 Revised Plan's phase implementation naming convention to correspond with PM.
- 4 Added Summary of Revisions section

## APPENDICES

- Appendix A - Az ISA Membership List
- Appendix B - Board of Directors
- Appendix C - April 7, 2000 Resolution

**Arizona Independent Scheduling Administrator Association (Az ISA)  
Membership List**

**APPENDIX A**

**Transmission Facilities Providers**

Class Chair – Mike Raezer, TEP

Member	Representative	Alternate
Arizona Electric Power Cooperative (AEPCO)	Larry D. Huff	Patricia Cooper
Arizona Public Service Company (APS)	Cary Deise	Robert Smith
Electrical District #3 of Pinal County	Grant R. Ward	Dennis L. Delaney
Graham County Electric Cooperative	Nelson Peck	Larry D. Huff
Tucson Electric Power Company (TEP)	Michael Raezer	Ed Beck

**Arizona Independent Scheduling Administrator Association (Az ISA)  
Membership List**

**Local Load Serving Entities**

Class Chair – Resal Craven, Citizens Utilities

Member	Representative	Alternate
Aguila Irrigation District	Henry A. Brubaker	Dennis L. Delaney
Ak-Chin Indian Community	Leonard S. Gold	Dennis L. Delaney
Buckeye Water Conservation & Drainage District	Jackie Meck	Dennis L. Delaney
Chandler Heights Citrus Irrigation District	Dan Kleinman	Dennis L. Delaney
Citizens Utilities Company	Resal A. Craven	Tyge Legier
City of Mesa	John Branch	Jerry Brouwer
City of Safford/Gila Resources	Kenneth Mecham	Dennis L. Delaney
City of Williams	Dennis Dalbeck	Michael Margrave
Duncan Valley Electric Cooperative	Jack Shilling	Patricia Cooper
Electrical District #7 of Maricopa County	R. D. Justice	Dennis L. Delaney
Electrical District #8 of Maricopa County	James Downing	Dennis L. Delaney

**Arizona Independent Scheduling Administrator Association (Az ISA)  
Membership List**

Member	Representative	Alternate
Electrical District #1 of Pinal County	Grant R. Ward	Dennis L. Delaney
Electrical District #2 of Pinal County	Thomas S. Martin	Andrew McBride
Electrical District #4 of Pinal County	Ron McEachern	Dennis L. Delaney
Electrical District #5 of Pinal County	William D. Woehlecke	Dennis L. Delaney
Electrical District #6 of Pinal County	Henry C. Douglas	Dennis L. Delaney
Harquahala Valley Power District	Jeffrey J. Woner	Dennis L. Delaney
HoHoKam Irrigation & Drainage District	Jack Long	Thomas S. Martin
Maricopa Water District	James R. Sweeney	Dennis L. Delaney
McMullen Valley Water Conservation & Drainage District	James D. Downing	Dennis L. Delaney
Navajo Tribal Utility Authority	Randall N. Medicine Bear	Walter F. Wolf, Jr.
Ocotillo Water Conservation District	Jackson Bogle	Dennis L. Delaney
Page Electric Utility	William Kent Romney	Rolland McHaney

**Arizona Independent Scheduling Administrator Association (Az ISA)  
Membership List**

Member	Representative	Alternate
Roosevelt Irrigation District	Stanley H. Ashby	Dennis L. Delaney
Salt River Project	Robert E. Kondziolka	Jessica J. Youle
San Tan Irrigation District	Ardith Viste	Dennis L. Delaney
Sulphur Springs Valley Electric Coop.	Creden W. Huber/ Anselmo Torres	Patricia Cooper
Tonopah Irrigation District	Elizabeth Story	Dennis L. Delaney
Town of Thatcher	Terry Hinton	Dennis L. Delaney
Town of Wickenburg	Tom Candelaria	Dennis L. Delaney
Trico Electric Cooperative	Charles N. Emerson	Ron Brown
Wellton-Mohawk Irrigation & Drainage District	Cory Prochaska	C. L. Gould



# Arizona Independent Scheduling Administrator Association (Az ISA) Membership List

## Aggregators

Class Chair – Patricia (Trish) Gambino

Member	Representative	Alternate
Arizona Public Service Energy Services	Bob Anderson	Barbara Klemstine
Avra Valley Irrigation & Drainage District	John Kai, Jr.	Michael A. Curtis
Cortaro-Marana Irrigation District	Robert Condit	Michael A. Curtis
Eastern Competitive Solutions	Leroy Michael	Michael A. Curtis
Enron Energy Services	Tom Delaney	Marcie A. Milner
Mohave Electric Cooperative, Inc.		Leroy Michael
Navopache Electric Cooperative, Inc.	Leroy Michael	
New Energy Ventures Southwest	Phil Harper	Tracey Fitchitt

# Arizona Independent Scheduling Administrator Association (Az ISA) Membership List

## Independent Generators & Wholesale Power Marketers

Class Chair – Vann E. Prater, Dynegy

Member	Representative	Alternate
Arizona Power Authority	Donald J. Esgar	James P. Bartlett
California Power Exchange, Corp.	Martin B. Ochotorena	Kenneth A. Fiscella
Calpine	Ralph Hollenbacher	Richard Zahner
Constellation Power Source, Inc.	Bruce McAllister	Jason Cox
Dynegy, Inc.	Vann E. Prater	Barry N. P. Huddleston
Enron Energy Services	Tom Delaney	Marcie A. Milner
Griffith Energy	Dana L. Diller	Jay I. Moyes
Pinnacle West Energy Corporation	David Rumolo	Justin Thompson
Reliant Energy Wholesale Group	John Orr	John Simpson
Southern Company Energy Marketing	Richard Menar	Bobby Campo

# Arizona Independent Scheduling Administrator Association (Az ISA) Membership List

## **End Users**

Class Chair – Andrew Gregorich, BHP Copper

Member	Representative	Alternate
Agri-Business Council of AZ	David C. Iwanski	Joseph F. Abate
Arizonans for Electric Choice & Competition	Kevin Higgins	
Central Arizona Water Conservation District	John D. Newman	Tom Delgado
Honeywell	David M. Mills	Kevin Higgins
Irrigation & Electrical Districts Association	Robert S. Lynch	R. Gale Pearce
ON Semiconductor	Dave Madden	
Phelps Dodge Corporation	Tim Summers	Choi Lee
Residential Utility Consumers Office	Lindy Funkhouser	Brian Townsend

**Arizona Independent Scheduling Administrator Association (Az ISA)  
Membership List**

**Ex officio Class**

Member	Representative	Alternate
Arizona Corporation Commission	Ray T. Williamson	Asher D. Emerson

## **APPENDIX B**

### **Arizona Independent Scheduling Administrator Association (Az ISA)**

#### **Board of Directors April 2000**

##### **Transmission Facilities Providers Class**

Larry Huff, Arizona Electric Power Cooperative (2 years)  
Cary Deise, Arizona Public Service Company (1 year)

##### **Local Load Serving Entities Class**

Dennis Delaney, K. R. Saline & Associates (consultant) (2 years)  
Rob Kondziolka, Salt River Project (1 year)

##### **Aggregators Class**

(Vacant) (1 year)  
Leroy Michael, consultant (2 years)

##### **Independent Generators and Wholesale Power Marketers Class**

Vann E. Prater, Dynegy (1 year)  
Vacant (2 years)

##### **End-Use Customers Class**

Kevin Higgins, Energy Strategies, Inc. (consultant) (2 years)  
Lindy Funkhouser, Residential Utility Consumers Office (1 year)

##### **Acting Executive Director**

Patrick J Sanderson, Arizona ISA

## APPENDIX C

### **APRIL 7, 2000 AISA Resolution AS AMENDED AND APPROVED BY THE AISA BOARD ON APRIL 7, 2000.**

The AISA Board recognizes that the functions preformed by the AISA are on an interim basis until a FERC approved Regional Transmission Organization is established. Therefore, the Board conditionally accepts the AISA Protocols as presented April 7, 2000. The Board further approves implementation of the Protocols on an interim basis subject to the following conditions:

- 1) The FERC regulated transmission owners (APS and TEP) will file the Protocols with FERC with notice of this Board's conditional approval in substitution for the draft AISA protocols which they had previously filed;
- 2) AISA will recognize SRP's substitution of the applicable portion of its Board approved protocols for the ARNT (except as set forth in (4) below), Must Run and Energy Imbalance Protocols. For those protocols other than ARNT, Must Run and Energy Imbalance SRP will recommend to the SRP Board to adopt the AISA protocols as soon as practicable and will fully implement the AISA Protocols when 50% of the direct retail access load in Section 4.3.4.1 (5) of AISA Protocol No. V is achieved. For the ARNT, Must Run and Energy Imbalance Protocols SRP will recommend to the SRP Board to adopt the AISA Protocols when both of the following occur: a) direct access load in the SRP distribution territory reaches 200 MW and b) statewide retail access reaches 500 MW.
- 3) By means of an appropriate instrument submitted with their regulatory authority and the AISA, the AISA transmission owners (APS, TEP, AEPCO and SRP) agree that solely for the limited purpose of furthering the interim AISA functions, each shall instruct its Scheduling Coordinator (for standard offer service) to exchange part of its standard offer ARNT as set forth in Paragraph 4 below, (approximately 500 MW for the State) to competitive Scheduling Coordinators serving load within the transmission owner's service area until such time as the AISA implements an ARNT auction and trading mechanism. Any AISA ARNT auction and trading or Energy Imbalance trading will not be implemented by the Board until competitive direct access load in Arizona exceeds 500 MW and the condition in Paragraph 7 below is met. Therefore, with regard to Protocol V and Protocol IX, implementation approval is granted at this time only for Section 4 of Protocol No. V (ARNT) as revised below, Section 3.6.1 of Protocol No. IX (Energy Imbalance), and such other sections of Protocol Nos. V and IX as may be necessary to implement these sections, respectively;
- 4) The following changes shall be and hereby are made to the ARNT protocol:
  - a) Section 4.3.4.1 is deleted in its entirety and replaced with the following:

"4.3.4.1 As an addendum to the procedure specified in Section 4.3.3, until any ARNT auction is approved and implemented, each TP's Standard Offer SC shall exchange up to an amount of MW (set forth by the individual TP below) of ARNT from the Standard Offer SC to Competitive SCs for service to retail load within the transmission owner's service territory, at the request of the Competitive SCs, in return for a Competitive SC's exchange to Standard Offer SC of an equal amount of ARNT on other ARNT paths to the same Load Zone.

    - (1) For Arizona Public Service Company (APS): The amount shall equal 200 MW from Palo Verde to the APS Load Zones.
    - (2) For Tucson Electric Power Company (TEP): The amount shall equal 80 MW from Four Corners to the TEP Load Zone.
    - (3) For Arizona Electric Power Cooperative, Inc. (AEPCO): The amount shall equal 4 MW from Westwing to Vail to service Retail Network Load in the Southeastern Arizona Load

Zone and 5 MW at Westwing for deliveries to the Western Area Power Administration to service Retail Network Load in the Mohave Electric Cooperative Load Zone.

- (4) For Citizens Utilities Company (Citizens Utilities): This Section 4.3.4.1 shall not apply to Citizens Utilities because there is only one ARNT path to each relevant Citizens Utilities' Retail Network Load Zone.
  - (5) For Salt River Project Agricultural Improvement and Power District (SRP): The amount shall equal 200 MW from Palo Verde to the SRP Load Zone."
- b) In Section 4.3.4.2, the commitment dates of "September 1, 2000" and "December 31, 2000" shall be changed respectively to "September 1, 2001" and "December 31, 2001";
- 5) The Protocols shall not be used to establish a precedent for transmission service to wholesale customers or for transmission service to be developed under Desert STAR and FERC regulated transmission owners shall include such statement and their agreement to it in any filing made with FERC seeking approval of implementation of the Protocols conditionally approved herein;
  - 6) An AISA Monitoring Plan shall be developed and presented to the Board for approval prior to September 1, 2000;
  - 7) The AISA shall develop a Business Plan for consideration and approval by this Board prior to June 30, 2001, covering all aspects of AISA activities after that date including any ARNT auction or energy imbalance trading mechanism;
  - 8) For energy imbalance penalties the dead band will be + or – 10%; outside the dead band the penalty will be 10% of the cost. The matrix in the protocols will be deleted.
  - 9) The FERC Filing Package to be presented to this Board for its consideration and approval prior to filing shall be consistent with this resolution. The AISA staff shall simultaneously present to the Board a detailed plan indicating how the AISA will perform the obligations it represents it will perform upon approval of its filing;
  - 10) Change Section 4.8 of the March 2000 draft Protocols Part VIII, Must Run to read: Recovery of Must-Run Generation Fixed Costs occurs as part of the retail end-use customers' service charge regulated by the ACC. Must-Run Generation Fixed Costs are the Fixed Costs associated with specific Must-Run Generation units. Must-Run Generation Fixed Costs will be limited to the percentage of each Must-Run Generation unit's annual usage that is attributable to providing Must-Run Generation service.