

**ARIZONA ISA  
DRAFT PROTOCOLS  
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**PROTOCOL 1  
INTRODUCTION**

1. No Issues To Discuss.

**PROTOCOL 2  
DEFINITIONS**

1. The term “Trading Entity” is not defined. (PWC, Appendix A, No. 36; Smith Table No. 2) **THIS ISSUE IS ALSO LISTED IN PROTOCOL 9.**
  
2. The definition of CU1 in the report entitled “Determination of Available Transfer Capability within the Western Interconnection” (which is included in the definition of Committed Uses in the Definitions section) includes reservations for Native Load forecasts and growth, ancillary services and other reservations beyond reliability- based needs. This could result in an SC’s total ARNT share being larger than its Retail Network Load. (PWC, Appendix A, No. 6; Smith Table No. 49). **THIS ISSUE IS ALSO LISTED IN PROTOCOL 5.**
  
3. Stakeholders not taking on the obligations of a SC that defaults, rather the CAO becoming the party that assumes the functions of a SC that is in default. (Smith Table No. 40).

**PROTOCOL 3  
TOTAL TRANSMISSION CAPABILITY  
DETERMINATION PRINCIPLES**

1. All issues regarding to this protocol have been incorporated into Protocol 5 since they also relate to ARNT.

**PROTOCOL 4  
TRANSMISSION RESERVATION AND  
OASIS MANAGEMENT PRINCIPLES**

1. All issues regarding to this protocol have been incorporated into Protocol 5 since they also relate to ARNT.

**PROTOCOL 5  
ALLOCATED RETAIL NETWORK TRANSMISSION PROTOCOL**

**I. Issues To Consider If ARNT Trading Is Implemented.**

**A. Generally.**

1. The use of an auction procedure, rather than the allocation mechanism originally proposed, to develop rights and the amount that will be paid for those rights. (Carl Imperato Draft No. 2: November 9, 1999).
2. Should the clearing price be based starting with the highest bid in the stack (as proposed) or the lowest bid in the stack. (Carl Imperato Draft No. 2: November 9, 1999).
3. Should bidders be prevented from receiving more transmission capacity than they need to serve their retail load? If so, how? (Carl Imperato Draft No. 2: November 9, 1999).
4. This section assigns ARNT to SCs six day's prior to the operating day based on the prior day's: (1) energy scheduled by the SC; (2) Control Area peak load; and (3) total Retail Network Load Schedules. The process by which ARNT is initially allocated to new SCs or ARNT is increased for SCs that increase their retail loads is not defined. (PWC, Appendix A, No. 3; Smith Table No. 46).
5. The definition of CU1 in the report entitled "Determination of Available Transfer Capability within the Western Interconnection" (which is included in the definition of Committed Uses in the Definitions section) includes reservations for Native Load forecasts and growth, ancillary services and other reservations beyond reliability- based needs. This could result in an SC's total ARNT share being larger than its Retail Network Load. (PWC, Appendix A, No. 6; Smith Table No. 49). THIS ISSUE IS ALSO LISTED IN THE SECTION ON PROTOCOL 2.
6. The cost to secure ATC to serve Retail Network Load is not defined. It is unclear whether an SC would be required to purchase the ATC according to the CAO's OATT or whether the SC would be subsequently credited for ATC used for retail purposes. (PWC, Appendix A, No. 7).

7. The real-time consequences to SCs of energy Schedules being modified by CAOs are not defined and there is no provision to communicate such changes to SCs. During real-time operations, the reduction of ARNT increases in Local Generation and increases in Imbalance Energy will result in additional costs to SCs. Notification to SCs of such real-time changes will allow the SC to make informed decisions as to whether some of its retail load can be curtailed or other arrangements can be made, thereby reducing Imbalance Energy charges. (PWC, Appendix A, No. 9; Smith Table No. 52).
8. The conditions that can lead to insufficient ARNT being allocated to SCs are not specified (e.g., planned or forced outages, line derations), therefore, it is not possible to ascertain whether these conditions are related to real-time operations, day-ahead Scheduling functions (1700 validation) or specific to the six-day ahead process of allocating ARNT to SCs. The earlier CAOs notify SCs of insufficient ARNT to serve retail load, the greater the chance that the affected SCs will be able to secure needed ATC. (PWC, Appendix A, No. 10).

**B. Issues Related To Timing, Communications and Clarification.**

**i. Issues Related to Must Run Generation.**

9. How will AZ ISA accomplish its duties and responsibilities to monitor and assess comparability in the determination of TTC. (Smith Table No. 86).
10. ARNT Protocol §1 and §4 set forth the goal of the parties to develop an ARNT trading mechanism and Must-Run Generation Protocol §5.2.2 sets forth the parties' intent to have AZ ISA track ARNT and Local Generation Requirements. The process and party responsible for the trading of ARNT has not been specified. It is unclear as to whether AZ ISA is responsible for developing and implementing the trading systems, or simply monitoring the actions of a third party that is responsible for ARNT trading. (PWC, Appendix A, No. 11; Smith Table No. 53).
11. The Initial Features methodology and the Ultimate Features methodology employed to calculate each SC's share of the Local Generation Requirement and allocated ARNT are different. The Initial Features methodology bases the allocation of ARNT on a percentage of the control area load, whereas the Local Generation Requirement is based on load within the Load Zones. The Ultimate Features methodology uses the control area load as the basis from which to allocate ARNT and calculate Local Generation Requirements to SCs. It is not clear as to why the total Retail Network Load (as opposed to total Retail Network Load *in the Load Zone*) is used in the calculation of Local Generation

Requirements in the Ultimate Features. (PWC, Appendix A, No. 32; Smith Table No. 72).

12. In accordance with Must-Run Protocol §5.2.5.1 if system conditions change the amounts of ARNT and Local Generation Requirements for all SCs, such changes in these amounts shall be allocated to each SC based on the same percentage that was calculated to initially allocate ARNT (either 6 days or by the 15<sup>th</sup> of the month for the subsequent month). The Manual does not address what becomes of the additional quantity or ARNT if ARNT is increased (e.g., a planned transmission service outage is place in service earlier than expected) after Balanced Schedules are submitted (day ahead). (PWC, Appendix A, No. 33; Smith Table No. 73). THIS ISSUE IS ALSO LISTED IN PROTOCOL 8.
13. The Protocol reference to the “15<sup>th</sup> day” does not explicitly state the significance of this limiting factor. This reference is associated with the implementation of one of the Manual’s ultimate features that allocates ARNT and the Local Generation Requirement to SCs by the 15<sup>th</sup> day of the month ahead. (PWC, Appendix A, No. 15; Smith Table No. 59).
14. There is no rationale provided in the Manual as to why Local Generation that is scheduled outside of the Load Zone must be scheduled by the 15<sup>th</sup> day of the month (for the next month) in order to be used in the calculation of ATC and the Must-Run Generation requirement. (PWC, Appendix A, No. 15; Smith Table No. 60).
15. The first two provisions indicate that an SC’s Local Generation Requirement will be specified at the same time an SC is notified of its allocation of ARNT. Allocated Retail Transmission Network Transmission Protocol §3.4.3 and Must Run Generation Protocol § 5.1.2 allocate ARNT six days prior to the operating day for the initial features operation and § 4.3.4 on the 15th of each month for the subsequent month for the ultimate features operation. In the Scheduling Protocol there is no mention of a time associated with the CAO providing to each SC its share of the Local Generation Requirement. Scheduling Protocol §6.3.3 requires each SC to submit to the CAO its initial Local Generation Schedule by 0800 hours one day in advance of the operating day. (Smith Table No. 32).
16. Means to obtain information is not identified. The Protocol states that loss factors, the estimated hourly total Retail Network Load and Local Generation Requirements and total retail Committed Use reservation will be posted by the CAO. However, the Protocol does not indicate where such information will be posted. (Smith Table No. 34).

**ii. Other Issues.**

17. How will the auction process impact must run generation? (Carl Imperato Draft No. 2: November 9, 1999).
18. The Protocols Manual does not describe the process whereby the AZ ISA and CAO are informed of exchanges of ARNT among SCs (which is an Ultimate Feature), the acquisition of ATC by SCs for retail use or other methods of aligning transmission paths to use with Retail Network Resources. This information must be communicated to CAO and AZ ISA prior to Schedules being verified in accordance with Scheduling Protocol §6.4 (by 1700) otherwise SCs' Schedules may be rejected due to a lack of ARNT or other transmission capacity. (PWC, Appendix A, No. 1).
19. Process and timing to acquire ATC for use, as RNITS is not well developed. (Smith Table No. 29).
20. Communication of changes in ARNT must be reported. The Protocols Manual does not describe the process whereby the AZ ISA and CAO are informed of exchanges of ARNT among SCs (which is an Ultimate Feature), the acquisition of ATC by SCs for retail use or other methods of aligning transmission paths to use with Retail Network Resources. (Smith Table No. 29).
21. The procedures for allocating ARNT to each SC does not specify a time certain by which an SC will be informed by the CAO of its ARNT, nor does this section specify that "Six Days Ahead" is six days ahead of the operating day. (PWC, Appendix A, No. 4).
22. This section of the Protocol states that loss factors, the estimated hourly total Retail Network Load and Local Generation Requirements and total retail Committed Use reservation will be posted by the CAO. However, the Protocol does not indicate where such information will be posted. (PWC, Appendix A, No. 2).
23. Section 3.4.3 in part states that the resultant ARNT will be provided to SC by the CAO. This section does not specify how the CAO will inform the SC of its ARNT. (PWC, Appendix A, No. 4).

24. Although the terms “Retail Network Load” and “Schedule” are separately defined, the term “Retail Network Load Schedule” is not defined in the Definitions section of the Manual. (PWC, Appendix A, No. 5; Smith Table No. 47).
25. The phrase “retail Committed Use” is ambiguous. It is not clear which Committed Uses are included in the meaning of this phrase. (PWC, Appendix A, No. 6; Smith Table No. 48).
26. ARNT Protocol §3.5 references §6.3 and §6.4 of the Scheduling Protocol for the establishment of deadline for the re-classification of ARNT to ATC if an SC does not submit an energy Schedule. However, the reference to Scheduling Protocol §6.4 does not re-classify ARNT as ATC, but instead re-assigns the ARNT to the CAO if an SC’s Schedule is not validated (i.e., Balanced Schedule). (PWC, Appendix A, No. 8; Smith Table No. 51).

**II. Issues To Consider In The Absence of ARNT Trading.**

27. FERC may consider the Protocols Manual’s reservation of transmission capacity for retail use (i.e., CU1) for up to one year for SCs based on CAO and SC retail network load projections to be in conflict with Order 888. (Smith Table No. 23).
28. The Protocols state that if sufficient ARNT is unavailable, “SCs may acquire Point-to-Point Transmission Service . . . in addition to their ARNT to serve their shares of Retail Network Load, pursuant to the CAO’s OATT.” However, Order No. 888 prohibits network customers from using point-to-point transmission service and network transmission service to serve the same network load at a common point of delivery. (HLA Scoping Memo, Issue No. 2).
29. SCs may acquiring Point-to-Point Transmission Service if sufficient ARNT is unavailable violates Order No. 888 (Smith Table No. 12).
30. Since ATC posted on a CAO’s OASIS is available to entities on a first come first serve basis, there is no assurance that ATC on specific transmission paths will be available to an SC to serve its retail load. (PWC, Appendix A, No. 10).

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31. The process to allocate transmission capacity annually based on CAO and SCs retail network load forecasts and retail generation resources may be in conflict with the requirements of FERC Order 888 that requires the specific identification of resources or contracts in order for transmission capacity to be reserved for retail use. (Smith Table No. 5).
32. Protocols allocate capacity across each path or interface based on a SC's load ratio share. This method is inconsistent with the method specified in Order No. 888. (Smith Table No. 10).
33. The Protocols allocate transmission capacity on the basis of each SCs projection of retail load for the forthcoming year. Reservations of capacity for future retail use based on network load projections may be in conflict with Order No. 888. (Smith Table No. 11).
34. SC's pro rata allocation of network transmission capacity based on the respective Standard Offer SC's (SO SC) generation resource mix (i.e., the transmission which has been set aside as a committed use for Retail Network Integrated Transmission Service) may impair the SC's ability to access competitive generation resources to serve retail customers. (Smith Table No. 20; Smith Table No. 87).
35. Timelines used to allocated ARNT are not precise and means of communication is not defined. (Smith Table No. 28).
36. Exchanging generation output among SCs to align generation to available transmission allocations may not be workable. (Smith Table No. 37).
37. Allocation of small percentages of transmission capacity on numerous paths are insufficient to transmit energy from the specific generation resources of the stakeholder to retail loads. (Smith Table No. 38).
38. The methodology to determine Committed Uses for the various CAOs is unclear, may adversely affect existing wholesale transmission customers and will lead to disputes. (Smith Table No. 42).

39. FERC may consider the Protocols Manual’s reservation of transmission capacity for retail use (i.e., CU1) for up to one year for SCs based on CAO and SC retail network load projections to be in conflict with Order 888. (Smith Table No. 90).
  
40. It is unclear how the CAO will take into account “projections for Retail Network Loads and Retail Network Resources made by Electric Service Providers and SCs.” FERC requirements set forth that available capacity reserved for native load be posted on OASIS and be available to others “except when actually needed to serve native load.” This has been interpreted to mean that an actual contract exists and is designated to serve retail load. Available capacity reserved for native load may or may not need to be posted on OASIS depending on whether its is long-term (need to post) or short-term capacity (do not need to post). (PWC, Appendix A, No. 12; HLA Scoping Memo, Issue No. 1B; Smith Table No. 54).
  
41. The cost to secure ATC to serve Retail Network Load is not defined. It is unclear whether an SC would be required to purchase the ATC according to the CAO’s OATT or whether the SC would be subsequently credited for ATC used for retail purposes. (Smith Table No. 50).

**PROTOCOL 6  
SCHEDULING PROTOCOL**

1. In the event that Load Zones are not coincident with control areas, SC's may submit schedules that are balanced within the control area but not balanced within a Load Zone (i.e., the SC has load within the control area but not in the Load Zone). (PWC, Appendix A, No. 14; Smith Table no. 57).
2. The Manual does not specify the geographic or electrical areas that are Load Zones for each CAO. It is not clear whether a Load Zone is a subset of a control area. (PWC, Appendix A, No. 14; Smith Table No. 56).
3. This Protocol allows CAOs to accept or reject SCs' schedules that are not submitted as Balanced Schedules. This type of discretion will most likely lead to SCs filing disputes. Also, without a clear set of criteria by which a schedule will be accepted or rejected by the CAO, it will be difficult for the AZ ISA to monitor and determine whether transmission access was granted on a non-discriminatory basis. (PWC, Appendix A, No. 21; Smith Table No. 66).
4. The Scheduling Protocol sections referenced do not provide any details on how an SC can access transmission capacity "freed-up" by the CAO in accordance with the Ancillary Services Protocol. The lack of a detailed procedure to re-allocate transmission capacity from the CAO to the SC for ancillary services use may lead to the SC securing more transmission capacity than necessary. Lastly, if the CAO does not re-allocate the transmission capacity it may be perceived as discriminatory by FERC. If a responsibility of the AZ ISA is to monitor and resolve disputes regarding the re-allocation of transmission capacity to SCs for their use in self-providing Ancillary Services, the process of re-allocation must be well defined. (PWC, Appendix A, No. 27). **THIS ISSUE IS ALSO LISTED IN PROTOCOL 7.**
5. There is no provision to inform SCs of changes in ARNT and Local Generation Requirements after Balanced Schedules are validated at 1700 hours one day ahead of the operating day. Protocol §5.2.5.1 allows for the changes in SC ARNT and Local Generation Requirements through real-time operations. These changes can result in SCs being subject to Imbalance Energy charges and/or additional Must-Run charges. (PWC, Appendix A, No. 31; Smith Table No. 31) .

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6. The amount and types of data which could be included includes emails, NERC tags, recorded telephone logs, etc. This represents an enormous amount of data for the AZ ISA to receive. (PWC, Appendix A, No. 13; Smith Table No. 55).
7. The Protocol's reference to "acquired transmission rights" in section 5.4 is not specific and may lead to confusion among SCs. (PWC, Appendix A, No. 16; Smith Table No. 61).
8. If the AZ ISA is to monitor transmission allocation and scheduling practices and perform a dispute resolution process, the AZ ISA should be informed of variations in scheduling requirements. (PWC, Appendix A, No. 17; Smith Table No. 35).
9. As stated in § 6 of this Protocol, pre-scheduling activities end at 1400 hours one day ahead of the operating day and ATC is recalculated. There is no reference to the recalculation of ATC in this Protocol after 1400 hours (beginning with § 6.3.5) one day in advance of the operating day. (PWC, Appendix A, No. 18; Smith Table No. 63).
10. The first Protocol section requires SCs to submit by 0800 hours their initial Local Generation Schedules (which must meet or exceed their share of Local Generation Requirements). The second Protocol section requires SCs to submit adjustments to its purchase of Must-Offer Generation two hours later. Since an SC's initial submittal at 0800 would satisfy its Local Generation Requirement, it is unclear as to what is required of the SC by 1000 hours. (PWC, Appendix A, No. 19; Smith Table No. 64).
11. The term "Must-Take Generation" is not defined in the Protocol or the Definition section of the Protocols Manual. This may lead to confusion as to what an SC must submit to the CAO. (PWC, Appendix A, No. 20; Smith Table No. 65).
12. Scheduling Protocol § 6.4.3 provides for the validation of SC Schedules by 1700 hour one day prior to the operating day. In addition, § 6.4.4 provides for an SC to correct their Balanced Schedules if problems arise during Control Area checkouts. There is no deadline associated with this function. (PWC, Appendix A, No. 22; Smith Table No. 30).
13. Increasing the scope of the current Scheduling Protocol by incorporating all deadlines applicable to CAOs and SCs for the scheduling of energy, ancillary services transmission service and local generation requirements. (Smith Table No. 21; Smith Table No. 88).

**PROTOCOL 7  
ANCILLARY SERVICES PROTOCOL**

**I. Outstanding Issues.**

1. The Scheduling Protocol sections referenced do not provide any details on how an SC can access transmission capacity “freed-up” by the CAO in accordance with the Ancillary Services Protocol. This may lead to the SC securing more transmission capacity than necessary. If the CAO does not re-allocate the transmission capacity it may be perceived as discriminatory. If a responsibility of the AZ ISA is to monitor and resolve disputes regarding the re-allocation of transmission capacity to SCs for their use in self-providing Ancillary Services, the process of re-allocation must be well defined. (PWC, Appendix A, No. 27; Smith Table No. 70) THIS ISSUE IS ALSO LISTED IN PROTOCOL 6.
2. This Protocol states that the charges associated with the CAO’s provision of Ancillary Services to SCs will be levied in accordance with the respective CAO’s OATT. The Protocols Manual, however, does not specify the required quantities of each Ancillary Service that an SC must either purchase from the CAO or self-provide. (PWC, Appendix A, No. 23; Smith Table No. 67).
3. These Protocol sections do not specify the party responsible for passing on penalties to SCs; nor does the Manual specify any contractual method among the affected parties for the billing, payment, collection or dispute resolution process associated with such penalties. (PWC, Appendix A, No. 24; Smith Table No. 68).
4. The process used by the CAOs for the dispatch of energy from Ancillary Service capacity self-provided or provided by a third party on behalf of an SC is not set forth in the Protocol. Such dispatch of Ancillary Service capacity is a real-time function of each CAO. (PWC, Appendix A, No. 25; Smith Table No. 69).
5. The Protocols Manual provides no requirement that the CAO and/or SC provide notice to AZ ISA that the SC has executed an agreement with the CAO and the SC has in place the infrastructure and procedures necessary to support the self-provision of Ancillary Services. (PWC, Appendix A, No. 28; Smith Table No. 36).

**II. Issues Largely Resolved By Addition of Section 3.3.5**

6. The effect of the provisions is that the SCs must either self-provide or pay the CAO for additional operating reserve. WSCC operating criteria (for wholesale transactions imported by the CAO to serve retail load) provide that firm imports over firm transmission include the obligation to include the firm export in its calculation of

operating reserves by the exporting CAO. This firm import may reduce the importing CAO's obligations to provide operating reserve (if the CAO's operating reserve is based on 7% of total CAO load and the import does not increase the CAO's single largest contingency). Under direct access, the CAO will no longer be financially responsible for providing operating reserves for loads served by a third party. However, the CAO must physically consider all load within its control area when calculating necessary operating reserves. Therefore, the SC becomes financially responsible for operating reserves. (PWC, Appendix A, No. 26; Smith Table No. 9).

7. Why are CAO's allowed to reduce operating reserve requirements by using firm imports, but SCs are not permitted to do so. (HLA Scoping Memo, Issue No. 7; Smith Table No. 8).

**PROTOCOL 8  
MUST-RUN GENERATION PROTOCOL**

1. Are the Protocols adequate with respect to calculating the Must Run requirements. (HLA Scoping Memo, Issue No. 3).
2. Will any local generation in an ILLZ be operating without regulated prices. (HLA Scoping Memo, Issue No. 3).
3. Should ARNT into an ILLZ be allocated by the ratio of each SC's load to all load in the ILLZ. (HLA Scoping Memo, Issue No. 3).
4. Clarify which regulator will review fixed and variable charges for Must Run generation. (HLA Scoping Memo, Issue No. 3; Smith Table No. 13).
5. The methodology used to calculate fixed and variable must-run generation charges are not clearly defined for each of the CAOs and that the Protocols Manual allows for these costs to be allocated to both retail and wholesale end-use customers. (HLA Scoping Memo, Issue No. 3; Smith Table No. 41).
6. CAOs being the sole provider of must-run generation in their respective control areas have market power. (Smith Table No. 8).
7. The term “dispatchable direct retail load-tripping” is not defined. Types of load that could be shed include retail loads being served under interruptible rates and loads curtailable by direct control signals. (PWC, Appendix A, No. 30; Smith Table No. 71).
8. It is not clear as to why “wholesale load” is included in section 4 of the Scheduling Protocol. The Must Run Generation Protocol does not include any reference to wholesale load in the calculation of Local Generation Requirements. (PWC, Appendix A, No. 15; Smith Table No. 58).

**PROTOCOL 9  
ENERGY IMBALANCE PROTOCOL**

**I. Outstanding Issues.**

1. While this section is intended to illustrate the “basis” upon which charges for Energy Imbalance Service charges were developed, the subsequent actual charges are significantly different than that outlined in Section 8 of the protocol. In particular, Section 8 allows for a minimum 2 MW deadband per SC. This feature renders portions of the table and calculations in Section 8 ineffective until an SC has a minimum of 133 MW of peak Retail Network Load (i.e., 2 MW divided by 1.5%). (PWC, Appendix A, No. 36; Smith Table No. 3).
2. It is unclear how a CAO will calculate hourly UFE and how adjustments are made to Competitive SC’s Energy Imbalance accounts. (PWC, Appendix A, No. 39; Smith Table No. 77).
3. There is no in-kind payment for Energy Imbalance service when within the deviation bandwidth. Usually, in-kind repayment for deviations within the bandwidth may be made within 30 days, unless the regional practice calls for a different time period during which repayment can be made in-kind. (HLA Scoping Memo, Issue No. 6; Smith Table No. 18).
4. The penalties assessed for deviations outside the bandwidth might be too harsh. Maybe the penalty levels should be reduced. (HLA Scoping Memo, Issue No. 6; Smith Table No. 17).
5. Competitive SCs are exposed to Energy Imbalance charges and penalties whereas Standard Offer SCs serving bundled customers are not since these Standard Offer SCs are “deemed” to have balanced schedules. (Smith Table No. 6)
6. Standard Offer SCs exempt from Energy Imbalance. (Smith Table No. 16)
7. The term “unique benefits and burdens” in section 3 of this Protocol is undefined. It is unclear what is meant by this phrase. (PWC, Appendix A, No. 35; Smith Table No. 74).
8. The term “Trading Entity” is not defined. (PWC, Appendix A, No. 36; Smith Table No. 2). THIS ISSUE IS ALSO LISTED IN PROTOCOL 2.

9. Energy Imbalance Protocol §6.1 indicates that a competitive SC's Energy Imbalance Service quantity will be calculated in accordance with the CAO's OATT. This appears to be in conflict with Energy Imbalance Protocol §5.1 that sets forth a methodology. (PWC, Appendix A, No. 37; Smith Table No. 75).
10. The table in this section does not define how the percentages contained in the first row are calculated. It is unclear whether the percentages are calculated outside of the 2 MW deadband or as a simple percentage of  $R_{Actual}$  or  $L_{Actual}$ . (PWC, Appendix A, No. 38; Smith Table No. 76).
11. Should the deadband apply to the aggregate amount of imbalance, or on an individual basis? (Tracey Fitchitt Redraft of Protocol 9 per Sanderson Email dated 11/11/99).
12. Is the 1.5% deadband appropriate for a retail market? (Fitchitt Redraft).
13. Should the costs associated with the proposed Trading Entity be recovered through the Az ISA's Tariff? (Fitchitt Redraft).

**II. Issues Largely Resolved By December 17, 1999 Modification To The Protocol.**

14. Pursuant to FERC Order 888, wholesale transmission customers must either purchase Energy Imbalance Service from the transmission provider or make alternative comparable arrangements to satisfy its Energy Imbalance Service obligation. This Protocol allows for a requirement that Standard Offer SCs are the only entities able to supply this service. Although, this Protocol specifically addresses retail direct access programs, FERC may consider this a deviation from Order 888, since the Protocols Manual is dependent upon the CAOs' Open Access Transmission Tariffs. This provision may be interpreted to be in conflict with the Ancillary Services Protocol §3.3.2 that allows for self-provision of Energy Imbalance service. (PWC, Appendix A, No. 34; Smith Table No. 1).
15. The methodology for pricing Energy Imbalance Service provided by the CAO may be interpreted as a riskless profit-making opportunity for the CAO. The definition of System Incremental Cost is computed as "the highest-cost dispatchable generation and/or third-party purchases made by the real-time operators incurred by the Control Area Operator up to an amount of energy equal to the system net energy imbalance." The "third-party purchases" referred to in this computation may or may not include the Market Price (as

defined). Therefore, the CAO will always recover its costs (SIC) or make a profit (when Market Price is greater than SIC) when supplying imbalance energy and the CAO will always pay the lowest available cost when taking imbalance energy. In addition, to the extent that a CAO's decremental cost is lower than the SIC or Market Price, the CAO may profit from taking imbalance energy. Since the CAO also has control over the contractual requirements to self provide imbalance energy, this may be a market power issue with the FERC. (PWC, Appendix A, No. 36; Smith Table No. 2).

16. The Energy Imbalance Protocol is inconsistent with two of FERC's basic pricing principles for ancillary services (not specific to Energy Imbalance): (1) a transmission provider must have authorization to provide ancillary services at market-based rates; and (2) the provider must demonstrate that it does not have market power before it will receive such authority, otherwise it must charge a capped cost-based rate. (HLA Scoping Memo, Issue No. 6)
17. The concept of CAOs charging Competitive SCs the higher of System Incremental Cost or the Market Price of energy, but only paying Competitive SCs the lower of SIC or Market Price. (Smith Table No. 7)
18. Energy Imbalance Protocol's method used to calculate Energy Imbalance prices results in charges to Competitive SCs at the higher of System Incremental Cost (SIC) or Market Price for under generation, and payments at the lower of SIC or Market Price for over-providing generation. (Smith Table No. 24; Smith Table No. 91).
19. Charges for Energy Imbalance Service should be assessed whenever the amount of energy taken by load differs from the scheduled amount by plus or minus 1.5%, provided that the deviation is at least 2 MW. (HLA Scoping Memo, Issue No. 6)

**PROTOCOL 10  
CONGESTION MANAGEMENT PRINCIPLES**

1. The Protocols Manual contains only principles associated with transmission congestion, not specific details on how congestion will be mitigated. (Smith Table No. 26; Smith Table No. 43; Smith Table No. 93).
2. It is intended that wholesale transactions will continue to be subject to the congestion management provisions described in the individual CAO's OATTs, or if applicable, the terms of any relevant contracts executed prior to July 1, 1999. However, the specific terms of the Protocol might not preserve this intent. (HLA Scoping Memo, Issue No. 5).
3. The application of pro-rata curtailments to many small SC schedules may be operationally complex and unworkable. (Smith Table No. 44).
4. AZ ISA should develop a simple congestion management program that is easy to administer and monitor, leaving the more difficult aspects of transmission congestion to Desert Star. (Smith Table No. 45).

**PROTOCOL 11  
EMERGENCY OPERATIONS PROTOCOL**

1. The Protocol’s reference to “WSCC predefined matrix” is not specific and may lead to confusion among SCs during times that instructions are issued for Schedules to be curtailed. (PWC, Appendix A, No. 40; Smith Table No. 78).
2. Wholesale transmission contracts that are used to serve end-use load within a “constrained area” may have different Curtailment priorities than those applied to serve Committed Uses (CU1). The across-the-board application of pro-rata Curtailments may not be compatible with these contracts. (PWC, Appendix A, No. 41; Smith Table No. 79).
3. The reference to Section 7.5 is incorrect. (PWC, Appendix A, No. 42; Smith Table No. 80).
4. An emergency dispatch provision that requires a point-to-point transmission customer to pay an embedded cost transmission charge and an incremental redispatch charge may be inconsistent with the Commission’s “Or” pricing policy. (HLA Scoping Memo, Issue No. 5).
5. Point-to-point transmission customers are not required to make their generation sources available to accommodate network redispatch under the *pro forma* tariff. (HLA Scoping Memo, Issue No. 5).
6. FERC is not likely to accept the Emergency Redispatch provision to the extent that the Protocols require that transmission customers taking point-to-point transmission service on those paths subject to redispatch are required to pay a share of those redispatch costs. (Smith Table No. 15).

**PROTOCOL 12  
AFTER-THE-FACT CHECKOUT PROTOCOL**

1. There are no outstanding issues related to this protocol.

**MISCELLANEOUS ISSUES**

1. The principles do not provide the Protocols Manual users adequate information on how the principles are to be implemented and communicated to affected parties. (Smith Table No. 22; Smith Table No. 89).
2. Removal of historical data from the Protocol Manual. (Smith Table No. 81)
3. Eliminate Ultimate Features from the Protocols Manual. Develop strategic planning document and staging plan that incorporates Ultimate Features concept. (Smith Table No. 82; Smith Table No. 83).
4. Procedures for communications of changes and distribution of Protocols Manual. (Smith Table No. 85)
5. The AZ ISA has no system to collect and analyze electronic data that is transmitted between CAOs and SCs. (Smith Table No. 25; Smith Table No. 92)
6. To the extent the Az ISA seeks to recover the costs associated with its establishment and implementation through a FERC imposed charge, it can expect to encounter opposition to efforts to recover such costs from the wholesale customer class. (Smith Table No. 14)
7. The AZ ISA should develop one statewide SC certification process that would be used by all CAOs. (Smith Table No. 27) (Smith Table No. 39) (Smith Table No. 94)