

APPENDIX 1.0: DAVID J. SALANT *CURRICULUM VITAE*

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Professional Experience

2004 – Principal, ERS Group, Incorporated
2004 – Research Professor, Clemson University
2003 – Adjunct Senior Research Scholar, Columbia University
2003 – 2004 Co-CEO and Founder, Optimal Markets, Inc.
2000 – 2003 Senior Vice President, NERA
2000 Special Consultant, NERA
1999 – 2002 President and Founder, Optimal Auctions, Inc d/b/a Alkera Inc.
1999– 2000 Managing Director, Navigant Consulting Incorporated/LECG, Incorporated
1998–1999 Principal, LECG, Incorporated
1996–1998 Director, LECG, Incorporated
1995–1996 Principal, Charles River Associates Incorporated
1993–1995 Principal Member Technical Staff, GTE Laboratories Incorporated
1991–1993 Research Associate, Department of Economics, Boston University
1987–1993 Senior Member Technical Staff, GTE Laboratories Incorporated
1983–1987 Assistant Professor, Department of Economics, VPI
1979–1983 Assistant Professor, Department of Economics, SUNY at Buffalo

Education

Ph.D., (Economics) University of Rochester, February, 1981.

M.A., (Economics) University of Rochester, May, 1978.

A.B., (Economics and Mathematics) Washington University, Magna Cum Laude, May, 1975.

Publications

1. “Default Service Auctions,” with Colin Loxley, *Journal of Regulatory Economics*, Vol. 26, No. 2 (2004): 201-229.
2. “Multi-Lot Auctions: Applications to Regulatory Restructuring.” In *Obtaining the Best from Regulation and Competition*, edited by M.A. Crew and S. Spiegel. Boston, MA: Kluwer Academic Publishers (2004).
3. “Standards in Wireless Telephone Networks,” with Neil Gandal and Leonard Waverman, *Telecommunications Policy*, Vol. 27 (2003): 325-332.
4. “Auctions of Last Resort in Telecommunications and Energy Regulatory Restructuring,” Chapter 7 in Michael Crew (ed.) in *Market Pricing and Deregulation of Utilities*, Kluwer Academic Publishers (2002).
5. “Auctions and Regulation: Reengineering of Regulatory Mechanisms,” introduction to special issue on Auctions and Regulation, *Journal of Regulatory Economics*, Vol. 17, No. 3, (May, 2000): 195 – 204
6. “Third Generation Wireless Telecommunications Standard Setting,” with Peter Grindley and Leonard Waverman, *International Journal of Competition Law and Policy*, IJCLP Web-Doc 2-3-1999.
7. Up in the Air: GTE’s Experience in The MTA Auction for PCS Licenses.” *Journal of Economics and Management Strategy*, Vol. 6, No. 3 (Fall, 1997): 549-72.
8. “Adoptions and Orphans in the Early Microcomputer Market.” With Neil Gandal and Shane Greenstein. *Journal of Industrial Economics*, Vol. 47, No. 1, (March, 1999):87-105.
9. “Monopoly Prices with Network Externalities.” With Luis Cabral and Glenn Woroch. *International Journal of Industrial Organization*, Vol. 17, No.2, (February, 1999): 199-214.
10. “Cost Allocation Principles for Pipeline Capacity and Usage, With G. Campbell Watkins, *Energy Studies Review* Vol, 8, No.2 (May, 1999): 91-101.
11. “Toward the Best Bet,” with Phillip McLeod, *Electric Perspectives*, Vol. 23, No. 5, (September-October 1998): 74-83.
12. “Behind the Revolving Door: A New View of Public Utility Regulation.” *RAND Journal of Economics* Vol. 26, No.3, (Autumn 1995): 362–77.

13. “Hollygopoly: Oligopolistic Competition for Hollywood Movies.” With Neil Gandal. *The Antitrust Bulletin* Vol XL, No. 3, (Fall 1995): 699–712.
14. “Preemptive Adoptions of an Emerging Technology.” With Michael Riordan. *Journal of Industrial Economics* Vol. 42, No. 3, (September 1994): 247-61.
15. “Trigger Price Regulation.” With Glenn Woroch. *RAND Journal of Economics* 23, No. 1 (Spring 1992): 29–51.
16. “A New Look at Public Utility Regulation Through a Revolving Door.” Chapter 9 in Michael Crew (ed.), *Economic Innovations in Public Utility Regulation*. Kluwer Academic Publishers, 1992.
17. “Promoting Capital Improvements by Public Utilities: A Supergame Approach.” With Glenn Woroch. Chapter 14 in W. Neufeind and R. Riezman (eds.), *Economic Theory and International Trade: Essays in Memoriam of John Trout Rader III*. Springer Verlag, 1992.
18. “Price Setting in Professional Team Sports.” Chapter 5 in Paul M. Sommers (ed.), *Diamonds Are Forever: The Business of Baseball*. The Brookings Institution, 1992.
19. “A Repeated Game with Finitely Lived Overlapping Generations of Players.” *Games and Economic Behavior* 3 (May 1991): 244-59.
20. “Crossing Deput’s Bridge Again: A Trigger Policy for Efficient Investment in Infrastructure.” With Glenn Woroch. *Contemporary Policy Issues* 9 (April 1991): 101–14.
21. “Time Consistency and Subgame Perfect Equilibria in a Monetary Policy Game.” With Douglas McTaggart. *Journal of Macroeconomics* 11, No. 4 (Fall 1989): 575–88.
22. “Equilibrium in a Spatial Model of Imperfect Competition with Sequential Choice of Locations and Quantities.” *Canadian Journal of Economics* 21, No. 4 (November 1986): 575–88.
23. “On the Consistency of Consistent Conjectures.” *Economics Letters* 16 (1984): 151–57.
24. “Existence of Vote Maximizing Equilibrium in One Dimension.” *Mathematical Social Sciences* 5 (August 1983): 73–87.

Non-Refereed Papers and Publications

“Exclusion and Integration in the Market for Video Programming Delivered to the Home,” with Michael Riordan. August 1994.

“The Effects of Deregulation on the Cable Television Industry.” With Robin Prager. June 1994.

“Some Stochastic Oligopoly Races for Experience.” Technical Report #0129-01-91-419, March 1991, GTE Laboratories Incorporated, Waltham, MA

Consulting Assignments

Telecommunications

Spectrum Auctions Advisor and Strategic Analyst

- For Leapwireless in a US PCS auction (2004)
- For QUALCOMM in the 700 MHz Auction (2Q 2003)
- For Taiwan Cellular Corporation (4Q 2001 and 1Q 2002)
- For Leapwireless in US PCS auction (2001)
- For QUALCOMM in Australian 3G auction (2001)
- For participant in US 700 MHz combinatorial auction (3Q 2001)
- For participant in Danish 3G auction (2Q 2001)
- For Primus and Ericsson in Australian PCS auction (2000)
- For Orange in UK 3G auction (2000)
- For T-Mobil in German 3G auction (2000)
- For Versatel in Dutch 3G auction (2000)
- For Leapwireless in US PCS auction (1999)
- For Telus in Canadian LMDS auction (1999)
- For QUALCOMM in the Australian PCS auction (1998)

- For QUALCOMM in the Telebras privatization (1998)
- For QUALCOMM/Pegaso in Mexican PCS auction (1997-8)
- For the Netherlands PTT in the Dutch DCS 1800 auction (1997-8)
- Advised GTFT in Brazilian B block cellular sale (1996-7)
- For Geotek in SMR(trunk radio) auction (1995)
- For GTE in the US A and B block PCS auction (1994-5)

Spectrum Auction Design

- Advised Industry Canada on 2300 MHz/3500 MHz auction (2003-4)
- Advised UK Radiocommunications Agency on spectrum trading (2002)
- Advised Netherlands DGTP on design of auction for sale of AM and FM frequency rights (2001 - 2)
- Advised Italian Ministry of Communication in design of 3G spectrum auction (2000)
- Advised Industry Canada on spectrum auctions for LMCS frequencies (1996) and 24/38 GHz frequencies (1999)
- Designed and implemented first spectrum auction for paging licenses for the Mexican Ministry of Communications (SCT), November 1996
- Designed and implemented first spectrum auction for trunk radio frequencies for the Guatemalan Superintendent of Telecommunications, May 1997
- FCC experimental testing of combinatorial auction mechanisms (2000)
- Advised IDA Singapore on 3G auctions (2001)
- Advised IDA Singapore on wireless local loop auctions (2001)
- Advised Australian ACA on 3G auctions (2000)
- Advised Australian SMA on design of 500 MHz license spectrum auction (1996)

- Led team that developed auction software adopted by Industry Canada, the Mexican Ministry of Communications and Transport and the Guatemalan Superintendent of Telecommunications
- Advised Colombia (Ministry of Communications) in draft auction legislation for first spectrum auctions
- Testimony on behalf of the FCC in Nextwave Personal Communications Inc v. Federal Communications Commission, May, 1999

Other Telecommunications

- Development of wireless industry simulation modeling team at Math Science Research Center at Bell Labs (2000 – 1).
- Led team in developing GTE's Universal Service auction proposal (1995 – 6)
- Testified at hearing of the International Competition Policy Advisory Committee on 3G standard setting procedures and competition policy, June 1999.
- Principal investigator in developing an interactive engineering economic cost model of PCS and broadband network services.
- Advised Peru (OSIPTEL) on universal service and account separations (1995)
- Assisted in drafting GTE's comments on price caps

Energy and Chemicals

- Developed design and implementation plan for Empire Connection transmission rights auction (2003)
- Developed and managed auction for Williams for selling ethylene (2003 – ongoing).
- Developed auction design adopted by OMV for natural gas release program (2003).
- Advised Acquirente Unico (Italy) on default service procurement options (2002 – 3).
- Advised Texas Utilities on energy entitlement auctions (2001 – 2)

- Developed Standard Offer Service procurement auction design for New Jersey Utilities (2000 - 2)
- Advised Netherlands DTe on transmission rights auctions (2000)
- Advised EPCOR on bidding strategy in Alberta PPA auction (2000)
- Advised EPCOR on bidding strategy in Alberta Balancing Pool auction (2000)
- Advised Chevron on bid strategy in 3rd round PEDEVESA auction of oil lease rights in Venezuela (1996)
- Testified on behalf of PanCanadian at Alberta Energy Utilities Board (January, 1996) on pipeline cost allocation principles.
- Advised participant in CalPX auction rule making process (1997)

APPENDIX 1.1: DAVID J. SALANT - PARTIAL LIST OF TESTIMONY

1. Alberta Energy Utilities Board, Rate hearing.

Submitted expert report and testified at rate hearing on behalf of PanCanadian, January, 1996.

2. US Bankruptcy Court, Southern District of New York.

Submitted expert report and testified in Nextwave Personal Communications Inc v. Federal Communications Commission, 1999. Bankruptcy No. 98B-21529.

3. US Department of Justice, International Competition Policy Advisory Committee.

Testified at hearings on standard setting as means of facilitating cartel agreement on behalf of QUALCOMM, May 17, 1999.

4. Federal Communications Commission.

Affidavit on Upper 700 MHz auction rules on behalf of QUALCOMM. DA – 00-1075, June 2000.

5. United States v. Motorola, Inc and Nextel Communications, Inc, Civ. No. 94-2331 (TFH)

Declaration on behalf of Hughes Network Systems on competitive impact of Nextel's acquisition of Geotek licenses in United States District Court for the District of Columbia, September 1, 2000.

6. Federal Communications Commission

Statement of 37 Concerned Economists on Spectrum Policy. WT-00-230. Feb. 2001.

7. New Jersey Board of Public Utilities. Docket No. EX 01-05-0303.

Testified on behalf of PSE&G at hearing on BGS Auction Design. Oct. 4, 2001.

8. Public Utility Commission of Texas. Project No. 24492.

Submitted written statements and testified on behalf of TXU on auction design. 2001.

1 **APPENDIX 2.0: COMMENTS ON DETAILS OF PROPOSED AUCTION RULES**

2

3 **Q. What is the purpose of this appendix?**

4 A. This appendix documents concerns regarding Ameren’s proposal that are
5 not discussed in detail in Sections II through VI of my testimony. As
6 discussed previously, Ameren’s proposal is incomplete. Below, I provide
7 a list of issues that Ameren should address in its rebuttal testimony so that
8 the ICC and other parties can have a complete proposal to evaluate. The
9 intent of this section is not to fill in all missing details, but rather to identify
10 missing details (in addition to those addressed in Sections II through VI of
11 my testimony). Where I believe some guidance may be appropriate, I
12 offer suggestions regarding how Ameren could address the issues I
13 identify.

14

- 15 1) Ameren should provide a detailed auction calendar.
- 16 2) Ameren should provide a bidder information packet.
- 17 3) Ameren should provide a comprehensive Auction Manager/auction
18 management manual.
- 19 4) Ameren should specify what information the ICC and the Auction Monitor
20 will have access to as well as when the information will be available prior
21 to the ICC’s decision in this docket. To the extent that this list will not be
22 complete prior to the ICC’s decision in this docket, Ameren should provide
23 a timeline for when the remaining items will be provided.

- 24 5) Ameren should provide details regarding the mechanism used for bidding,
25 including, but not limited to, answering the following questions. Will the
26 bidding take place via fax, phone, messenger service, or computer
27 software? Will bidders need to be physically present at a common
28 location or will bidders be able to bid remotely?
- 29 6) Ameren should specify the testing protocols for the mechanism used for
30 bidding. If the auction is to be conducted electronically, there need to be
31 significantly different types of testing than is described. Test scripts, as
32 described Ameren's Response to Data Request RZ 2-29, have value in
33 testing procedures, but are of limited value in testing algorithms in, or
34 reliability of, software.
- 35 7) Ameren should specify when it will make sufficient data for suppliers to be
36 able to estimate hourly load and daily capacity and transmission peak load
37 allocations and "supplemental data to assist bidders" available to bidders.
38 (See, Ameren Exhibit 6.9, pp. 10.)
- 39 8) Ameren should specify when it will provide "all necessary information to
40 potential bidders concerning how Auction prices are translated into the
41 commodity supply portion of customer rates." (See, Ameren Exhibit 6.9,
42 p. 6.)
- 43 9) Ameren should specify how the charges for fixed ancillary services will be
44 determined. Moreover, Ameren should establish a mechanism to ensure
45 the reasonableness of the charges. (See, Ameren Exhibit 6.9, p. 6.)

- 46 10) Ameren should fully specify the mechanism for nominating FTRs. (See,
47 Ameren Exhibit 6.9, p. 7.)
- 48 11) Ameren should provide details about the process and criteria for maximum
49 and minimum possible starting prices, actual starting prices, load caps,
50 and auction volume adjustments.
- 51 12) Ameren should specify the guidelines the Auction Manager will use to
52 revise the load cap for each product in the auction.
- 53 13) Ameren should provide a description of how the “target eligibility ratio” will
54 be determined. (Ameren Exhibit 6.9, p. 23-24.)
- 55 14) Ameren should specify what “further information” its Auction Manager may
56 need to release “no later than three (3) business days before the start of
57 the Auction ... regarding the possible values of the target eligibility ratio
58 and the circumstances under which a second volume cutback may be
59 undertaken.” (Ameren Exhibit 6.9, p. 24.)
- 60 15) Ameren could simplify the complexity of the proposed switching and exit
61 bid rules if the Auction Manager were to conduct the auction with small bid
62 decrements and short rounds. If Ameren disagrees with this
63 recommendation, it should explain why it disagrees with this
64 recommendation.
- 65 16) Ameren’s proposed auction rules do not permit bidders to request
66 switches and withdrawals from products for which there was no excess
67 supply in the previous round. However, such requests should be granted
68 when there are offsetting switches to those products for which withdrawals

69 are requested. This could lead to more efficient results. If Ameren
70 disagrees with this recommendation, it should explain why it disagrees
71 with this recommendation.

72 17) Ameren should specify the order in which simultaneous switches and
73 withdrawals will be processed. Allowing switches to take priority over
74 withdrawals errs on the side of keeping more supply in the auction, and is
75 probably preferable to the reverse.

76 18) Ameren should provide the ICC with the formula but not the parameters
77 used to determine the range of excess supply that will be reported to
78 bidders. The Auction Manager should be required to develop the
79 parameters used to determine the range of excess supply that will be
80 reported to bidders in consultation with the ICC Staff and the Auction
81 Monitor.

82 19) Ameren should clarify the order in which chains of switches and
83 withdrawals will be processed. With four products, there can be chains of
84 switches. For example, one bidder may wish to switch from product 1 to
85 2, another from 2 to 3, a third from 3 to 4, and a fourth from 4 to 1.

86 20) Ameren should explain why its proposals provide for both provisional and
87 final measures of excess supply.

88 21) Ameren should explain why the Auction Manager has the discretion to
89 override bid decrements in any round in the auction. Ameren should
90 describe under what conditions the Auction Manager would use her
91 discretion to override bid decrements.

- 92 22) Ameren should justify the selection of bid decrement ranges by the
93 Auction Manager.
- 94 23) Ameren should explain how the Auction Manager will determine the length
95 of a recess or extension. Ameren should also explain why recesses or
96 extensions are necessary.
- 97 24) Ameren should explain under what circumstances the Auction Manager
98 would call a time-out for up to four hours.
- 99 25) Bidders should be informed of the provisional allocation of tranches as
100 soon as the auction closes and before an official decision comes from the
101 ICC. If Ameren disagrees with this recommendation, it should explain why
102 it disagrees with this recommendation.
- 103 26) Ameren should describe the conditions under which associated bidders
104 can participate in the auction.
- 105 27) Bidders should be required to disclose all agreements that would prevent
106 them from meeting the disclosure and affiliation requirements. If Ameren
107 disagrees with this recommendation, it should explain why it disagrees
108 with this recommendation.
- 109 28) Ameren should describe the criteria the Auction Manager will use to
110 determine the course of action if a bidder cannot make the required
111 certifications.
- 112 29) Ameren should describe the sanctions that will be imposed on a qualified
113 bidder for failing to properly disclose information relevant to determining

- 114 associations, for coordinating with another bidder without disclosing this
115 fact, and for releasing confidential information.
- 116 30) Ameren should have contingency plans in place in the event that the
117 Auction Manager or Auction Monitor is unable to perform their duties.
118 Ameren should describe in detail those contingency plans.
- 119 31) Ameren should clarify the discussion of switching priorities because the
120 discussion provided in its proposed auction rules is not clear. The highest
121 priority is 1. How many other priorities are there besides 1? Are there as
122 many priorities as there are potential switches?
- 123 32) Ameren should clarify its proposed auction rules to state that withdrawals
124 and switches will only be disallowed when they would leave a previously
125 fully subscribed product under-subscribed.
- 126 33) Ameren should provide a list of definitions in its CPP (Ameren Exhibit 6.9)
127 and avoid inexact repetition of definitions. For instance, a definition of a
128 bid decrement is provided once on page 18 and two more times on pages
129 36 and 37.
- 130 34) Ameren should explain, in detail, why a credit limit cap is necessary in
131 Article 6 of its supplier forward contracts. That is, would the sole use of a
132 “percent of tangible net worth” criterion in Article 6 provide an insufficient
133 credit limit criterion?
- 134 35) Ameren should explain, in detail, why the maximum dollar amount of net
135 worth that is creditable differs across credit rating categories,
136 independently of the percentage of tangible net worth (“TNW”), as shown

137 on Table A, provided in Article 6 of the supplier forward contracts. That is,
138 why does the ratio of the credit limit cap to the percentage of TNW vary
139 across credit rating category?

140 36) Ameren should justify capping the credit limits for the supplier (or
141 guarantor) at “A- and above”, as provided in Article 6 of its supplier
142 forward contracts.

143 37) Ameren should explain why it is necessary to “notch down” corporate
144 issuer credit ratings from Moody’s Investors Service, Inc. to determine
145 suppliers’ (and guarantors’) creditworthiness under Article 6 of its supplier
146 forward contracts.

147 38) Does Ameren agree that its proposed tariffs should include language that
148 provides the ICC an opportunity to review any reduction in credit
149 requirements as allowed under Section 6.1 of the supplier forward
150 contracts? If Ameren disagrees with including such language in its
151 proposed tariffs, then Ameren should explain why and, in addition, identify
152 any limits on Ameren’s discretion to reduce its credit requirements.